



Version 6.1 Updated for the 2021  
Project Management Professional (PMP)<sup>®</sup> Exam



## **Crosswind Success Series: PMP<sup>®</sup> Exam Bootcamp Manual**

**[www.crosswindpm.com](http://www.crosswindpm.com)**

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## 15.4. Project Procurement Management Formulas and Variables

Description	Formula	Variable (Component)	Example
The <b>expected cost</b> of the work in the contract for an FPIF contract	Sum of the costs of the work of the contract for the seller	(TC) Target Cost	TC = \$1M
The <b>expected profit</b> of the work in the contract for an FPIF contract	Can be calculated in a variety of ways, depending on contract environment	(TP) Target Profit	TP = \$200,000
The <b>profit margin</b> compared to the target cost for an FPIF contract	Typically established by industry and company	Profit Rate at Target Cost	20%
The <b>total of the target cost and target profit</b> ; should be the total target value of the contract work barring any overruns or underruns for an FPIF contract	Target Cost + Target Profit Target Price = TC + TP	Target Price	\$1,200,000
A <b>percentage of the target cost (TC)</b> for an FPIF contract  <i>This is the maximum total amount the buyer expects to pay for the work. Anything above this amount is covered by the seller.</i>	Typically established by industry and company	Ceiling Price	140% of Cost or \$1,400,000

Description	Formula	Variable (Component)	Example
The <b>ratio between the buyer and seller for any cost savings or overruns</b> that impact the total contract amount and profit for an FPIF contract or other applicable contract	Negotiated between buyer and seller	Share Ratio (SR)	70%/30%
The total <b>amount of money the buyer will pay</b> regardless of cost overrun on the contract for an FPIF contract	$PTA = (\text{Ceiling Price} - \text{Target Price}) / \text{Buyer Share} + \text{Target Cost}$ $\$1,285,714.29 = (\$1,400,000 - \$1,200,000) / 0.70 + \$1,000,000$	Point of Total Assumption (PTA)	\$1,285,714.29
<b>Calculation that determines the point</b> at which it makes more sense <b>to make-or-buy</b> (rent) something needed for a project	$(\$ \text{ per day}) \times (\text{number of days}) = \text{purchase price} + (\text{maintenance fee per day} \times \text{number of days})$	Make-or-Buy Analysis	$\$100x = \$5,000 + \$50x.$ Solve for x as the number of days

## 15.5. Project Procurement Management Terminology

Term	Description
<b>Acquisition</b>	Obtaining human and physical resources for project activities
<b>Advertising</b>	Any activity that results in positive attention to the project
<b>Agreements</b>	A document or communication that defines the intentions of a project; examples include a contract, a memorandum of understanding (MOU), and letters of agreement
<b>Bid Documents</b>	The documentation utilized to request information, quotations, or proposals from prospective sellers
<b>Bidder Conference</b>	Meetings with potential sellers that occur before bids or proposals are prepared and which are used to ensure that all sellers have an unambiguous and common comprehension of the procurement; also known as a contractor conference, vendor conference, or pre-bid conference
<b>Bill of Materials (BOM)</b>	A formal document showing the hierarchy of the components and subcomponents that make up the product
<b>Buyer</b>	The person, group, or entity that obtains the products, services, or results of the project
<b>Claim</b>	A demand, under the terms of the contract, for consideration by the buyer from the seller or the seller from the buyer
<b>Claims Administration</b>	The process of managing a project's contract claims
<b>Closed Procurements</b>	The written formal notification, from the buyer to the seller, that the contract has been completed; typically completion is dependent on the seller meeting the terms and conditions of the contract
<b>Conduct Procurements</b>	The process of receiving the seller response(s) to the request(s) for quote(s), information, proposal(s), or bid(s), then determining the seller(s), and awarding the contract(s)
<b>Contract</b>	A mutually binding agreement that requires, in accordance with the terms of the agreement, the seller to deliver goods or services to the purchaser and the purchaser to compensate the seller for those goods or services
<b>Contract Change Control System</b>	System that manages contract amendments
<b>Control Procurements</b>	The process of managing contract performance
<b>Cost Plus Award Fee Contract (CPAF)</b>	A contract in which the seller receives payments for actual costs related to completed work plus an award that is at the discretion of the buyer; the award that typically represents seller profit
<b>Cost Plus Fixed Fee (CPFF) Contract</b>	A contract in which the supplier receives payment for allowable costs plus a fixed fee typically based on estimated cost
<b>Cost Plus Incentive Fee (CPIF) Contract</b>	A contract in which the supplier receives payment for allowable costs, as well as a pre-negotiated fee and an incentive fee (if incentives are met)
<b>Cost Plus Percentage of Cost (CPPC) Contract</b>	A contract that reimburses the seller for cost, plus a negotiated percentage of the total costs

<b>Term</b>	<b>Description</b>
<b>Cost Reimbursable (CR) Contract</b>	A mutually binding agreement that compensates the seller for goods or services on the basis of actual costs plus a fee that represents the seller's profit and typically includes an incentive if specific objectives, such as budget or schedule targets, are met
<b>Fee</b>	Profit realized by the seller upon completion of a procurement contract
<b>Fixed Price Contract</b>	A mutually binding agreement that compensates the seller for goods or services on the basis of a fixed amount identified in the agreement, notwithstanding the seller's costs; also known as a Firm Fixed-Price Contract (FFP)
<b>Fixed-Price Incentive Fee Contract (FPIF)</b>	A contract in which the seller provides products or services based on a well defined scope of work for a set price, but which allow for additional payments to the seller if predefined performance objectives are met; the seller assumes the majority of the risk
<b>Fixed-Price with Economic Price Adjustment Contract (FP-EPA)</b>	A contract that requires the seller to provide products or services for a set price based on a well defined scope of work and allows a price adjustment over time in response to a specific indicator, typically a change in the cost of labor or materials; the seller assumes the majority of the risk
<b>Incentive Fee</b>	An amount paid, in addition to the contract amount, for exceeding expectations, particularly in the areas of cost, schedule, or technical performance
<b>Invitation for Bid (IFB)</b>	A procurement document, typically used when requirements are complete, clear, and accurate or with governmental sealed bids, issued by the seller to request a proposal from the seller; in addition to detailed requirements, it often includes acceptability criteria
<b>Make-or-Buy Analysis</b>	The process of determining whether specific work should be created by the project team or purchased from an external source
<b>Make-or-Buy Decision</b>	The result of the process of determining whether specific work should be created by the project team or purchased from an external source
<b>Negotiated Settlement</b>	The resolution and finalization of any contract related issues, claims, and disputes
<b>Negotiation</b>	The process of bringing about a final, objective settlement of all outstanding issues, claims, and disputes
<b>Payment Systems</b>	A system that creates invoices and tracks payments for project products and services
<b>Plan Procurement Management</b>	The process of documenting purchasing decisions and approaches, as well as identifying potential vendors for contract work
<b>Point of Total Assumption (PTA)</b>	The total amount of money the buyer will pay regardless of cost overrun on the contract
<b>Procurement</b>	The acquisition of goods or services from an outside source (vendor)
<b>Procurement Audits</b>	Examinations of contracts and contract processes for legality, completeness, accuracy, and effectiveness
<b>Procurement Documents</b>	The instruments used with bid and proposal activities that include the Invitation for Bid (IFB), the Request for Information (RFI), the Request for Quotation (RFQ), and the Request for Proposal (RFP)
<b>Procurement Management Plan</b>	The document, part of the project or program management plan, used to describe the methods that will be employed by the project team to obtain goods and services from outside the organization

Term	Description
<b>Procurement Performance Reviews</b>	An examination of the seller's execution of the contract, particularly as it relates to the on schedule and within budget delivery and overall quality of the product or service
<b>Procurement Statement of Work</b>	A description of a procurement item that is broken down to the appropriate level of detail that will allow potential sellers to determine if they are capable of providing the products or services associated with the contract scope
<b>Procurement Strategy</b>	The buyer's approach to determining the project delivery method and the class of legally binding agreement(s) that will be used to deliver the desired results
<b>Project Procurement Management</b>	The processes required to purchase or acquire any products, services, or results from a source outside of the project team
<b>Proposal Evaluation Techniques</b>	A formal seller review process used with complex procurements and carried out in accordance with the buyer's procurement policies
<b>Prospective Sellers of Products or Services</b>	The list of vendors the company has determined to be capable of providing goods or services
<b>Records Management System</b>	The processes, controls, and tools used to record and maintain project information
<b>Request for Information (RFI)</b>	A buyer issued procurement document requesting a potential seller to provide information related to the seller's ability to deliver a product, service, or capability
<b>Request for Proposal (RFP)</b>	A procurement document issued by the buyer to request a proposal from the seller; typically describes acceptability criteria and a description of the product, service, or capability the buyer wishes to procure
<b>Request for Quote (RFQ)</b>	A document used to get bids or quotes from possible suppliers, usually for commodity type items, with minimal customization
<b>Retainage</b>	A part of the payment per the terms of the contract that the buyer retains until the project is complete; used to ensure that the seller completes the work per terms of the contract
<b>Selected Sellers</b>	Vendors chosen to provide products or services
<b>Seller</b>	An individual or entity that provides goods or services to a buyer
<b>Seller Proposals</b>	An offer from a vendor who is being considered as a provider of a product or service
<b>Service Level Agreement (SLA)</b>	A contract between an internal or external service provider and the end user that delineates the level of service expected from the service provider
<b>Source Selection Criteria</b>	Seller attributes that will be considered by the buyer; typically includes capacity to deliver, costs, delivery dates, expertise, and contract approach
<b>Termination Clause</b>	A clause in the contract that allows both the buyer and the seller to end the contract
<b>Time and Material Contract (T&amp;M)</b>	A mutually binding agreement that compensates the seller for goods or services on the basis of fixed hourly rates for labor and the actual costs of materials; represents a composite of a cost-reimbursable contract (cost of materials can rise) and a fixed-price contract (labor cost are agreed on by buyer and seller before the start of the contract)

The source for the above definitions is the Glossary of the Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide) – Sixth Edition*, Project Management Institute Inc., 2017

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## 15.6. Project Procurement Management Tests and Exercises

### 15.6.1. Project Procurement Management Practice Test

Answers are in section 15.7.1.

- The project is using a company to provide the technicians for a national network upgrade project. Presently, the buyer is having issues with the seller accomplishing the work of the project according to the contract schedule. The buyer lets the seller know that it is in default for failure to execute per terms of the contract. The buyer also decides to stop payment for work already accomplished until the issue is resolved. What most accurately describes this situation?

  - The buyer is right in stopping payment until the issue is resolved
  - The buyer is wrong in stopping payment until the issue is resolved
  - Both sides appear to be in default of the contract
  - The seller is wrong and needs to correct the situation
- The contract is expected to cost \$560K. Actual cost is \$510K. There is a 50%/50% share of any cost savings. What is the total value of the contract?

  - \$535K
  - \$510K
  - \$560K
  - \$610K
- You are the project manager working with the customer on a call center implementation. Your company is responsible for the call center infrastructure. The customer needs some modifications to the scope of the project due to the availability of new functionality. This modification requires that the scope of work to the contract be modified. Who can modify the contract?

  - The project manager for the buyer
  - The contract administrator for the company
  - The project managers for the buyer and seller
  - The project manager for the seller
- What type of contract exposes the seller to the most risk when entering into a contract?

  - Time and materials because there is no provision for an increase in the workers salary
  - Cost plus percentage of cost because the seller's net can decrease if the cost decreases
  - Purchase order because there is no provision for an increase in material costs
  - Fixed-price because there is no provision for increases in the seller's costs

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5. You are the project manager for an IT outsourcing project. You are currently doing the plan procurement management process. What process will you perform next?
    - (A) Conduct procurement
    - (B) Close procurement
    - (C) Control procurement
    - (D) Plan solicitation
  
  6. You are the project manager for an IT outsourcing project. You are currently doing the plan procurement management process. What is a tool and technique you will use with this process?
    - (A) Procurement management plan
    - (B) Make or buy analysis
    - (C) Make or buy decision
    - (D) Evaluation criteria
  
  7. You are purchasing 67 desktop computers, monitors, and a standard desktop software package for an upcoming project. What type of contract will you likely use?
    - (A) Net 30 because interest charges are avoided if you pay the entire cost within 30 days
    - (B) Fixed-price because the price will be locked in
    - (C) Net 90 because interest charges are avoided if you pay the entire cost within 90 days
    - (D) Purchase order because it is a general purchase vehicle for commodity purchases
  
  8. You are the project manager for a computer network installation project. You have a list of all the hardware, software applications, cabling, and various pieces that you will need to complete the installation and setup. What best describes this approach?
    - (A) Functional scope of work
    - (B) Design scope of work
    - (C) Statement of work
    - (D) Requirements documentation
  
  9. What is the primary mechanism that needs to be in place for a single source noncompetitive procurement?
    - (A) A mechanism that ensures there are no kickbacks
    - (B) A mechanism that ensures that there is no impropriety or unreasonable pricing
    - (C) A mechanism that ensures there is no price gouging
    - (D) A mechanism that ensures there is no inappropriate relationship between the procurer and the source



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10. A city is buying services from a construction company to build a new freeway for \$4M over three years. At the start of each year, the amount fluctuates relative to the national cost of living. This is an example of what type of contract?
- (A) Cost plus economic price adjust
  - (B) Cost plus incentive fee
  - (C) Fixed-price cost of living adjust
  - (D) Fixed-price economic price adjust
11. The project will be using a company to provide the technicians for a national network upgrade project. Presently, the team is in the process of conducting a make-or-buy analysis. What is the primary factor that will influence the team's decision?
- (A) The comparison of skill sets between alternatives
  - (B) The comparison of resource availability between alternatives
  - (C) The comparison of costs between alternatives
  - (D) The comparison of experience between alternatives
12. You have been assigned as a project manager of a computer network installation project. You are currently doing the conduct procurements process. You have just entered into an agreement with a vendor. Which of the following do you need to reference to get to this stage?
- (A) Change request
  - (B) Contract file
  - (C) Project scope statement
  - (D) Source selection criteria
13. Your company just completed a make-or-buy decision regarding a new area of development. The project manager and the team will refer to the procurement management plan for guidance in connection with a number of ensuing activities. Which of the following best describes those activities?
- (A) Establishing which procurement documents are needed, running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, and establishing contracts
  - (B) Running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, establishing contracts, executing contracts, and closing contracts
  - (C) Establishing which procurement documents are needed, creating the procurement documents, running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, and establishing contracts
  - (D) Running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, establishing contracts, administering contracts, and closing contracts

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14. The project utilizes a vendor to provide the technicians for a national network upgrade project. The buyer agrees to pay the vendor an incentive fee. Of the following, which is the most logical reason the buyer would pay the fee?
- (A) The buyer wants to ensure that the vendor will be responsive to any issues that arise during the upgrade
  - (B) The buyer wants to ensure that the vendor's standard of productivity is aligned to that of the buyer
  - (C) The buyer wants to ensure that the vendor will work well with the buyer's employees
  - (D) None of the answers
15. You are the project manager on a defense project. The buyer wants to get an idea of how much he will pay for cost overruns. With the following variables, calculate the point of total assumption: Expected Cost=\$125,000; Expected Profit=\$25,000; Target Price=\$150,000; Buyer/Seller Share Ratio=60%/40%; Ceiling Price=\$180,000; Maximum Overrun=130%.
- (A) \$175,000.00
  - (B) \$137,019.23
  - (C) \$151,442.31
  - (D) \$129,807.69
16. The project will be using a company to provide the technicians for a national network upgrade project. The buyer of the solution is providing a design scope of work to the seller. Of the following, which is the most logical reason this scope was selected?
- (A) The buyer knows exactly what is needed and wants no variance from the specifications
  - (B) The buyer's only concern is that the vendor achieves the required goals
  - (C) The buyer must have the solution in place within a tight timeframe and needs the vendor to conform to a rigid schedule
  - (D) The buyer does not have the personnel to ensure that each step in the process is completed according to specifications
17. Of the following, what best represents a contract component and the reason for including it in a contract between a buyer and vendor in connection with the purchase of a debit card add-on system?
- (A) Share because the buyer needs the work done in a timely manner
  - (B) Incentive because the buyer needs the costs to come in as low as possible
  - (C) Incentive because the buyer needs the work done with minimal resources
  - (D) Share because the buyer needs the costs to come in as low as possible

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18. The project will be using a company to provide the technicians for a national network upgrade project. The buyer is providing to the prospective seller a greatly detailed description of what the buyer wants the seller to do on the project. What type of document is being provided to the seller?
- (A) Request for information (RFI)
  - (B) Request for proposal (RFP)
  - (C) Invitation for bid (IFB)
  - (D) Request for quote (RFQ)
19. A contract is being negotiated with a single source provider that will contain special provisions since the work is being performed at a loss so the provider can gain experience in the market. Of the following, which best represents a special provision?
- (A) Payment terms, including arbitration remedies
  - (B) Intellectual property rights and required nondisclosure documentation
  - (C) Ability to subcontract
  - (D) Criteria around which the provider of services can refer to the work
20. You are the project manager for a merger project. You are creating the procurement management plan and revising the procurement strategy. When this is done what process will you perform next?
- (A) Solicitation planning
  - (B) Control procurements
  - (C) Close procurements
  - (D) Conduct procurements
21. All the following items are requirements of a legal contract except...
- (A) A proposition to exchange something of value for something of value
  - (B) A purpose for the contract
  - (C) A buyer willingness to accept a seller's offer
  - (D) A buyer and seller with the capacity to enter into a contract
22. You are the owner of a house painting company. You occasionally have the need for an automated paint sprayer. This tool sells for \$1,250 and costs \$20 a day to maintain. You can rent one for \$150 a day with maintenance included. How many days would you need to use this tool before it makes sense to buy instead of rent?
- (A) Twelve days
  - (B) Six days
  - (C) Ten days
  - (D) Eight days

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23. The customer is doing a national network upgrade program. The customer has issues with the vendor accomplishing the work in accordance with the schedule set out in the contract. The customer informs the vendor that it is in default for failure to execute per the terms of the contract. A senior manager for the customer suggests stopping payment for work already accomplished, but the procurement department rejects this idea. What most accurately describes this situation?
- (A) The senior manager's suggestion to stop payment until the issue is resolved is the best course of action
  - (B) The procurement department's rejection of the senior manager's idea is the best course of action
  - (C) Both sides appear to be in default of the contract
  - (D) The vendor appears to be wrong and needs to accept lack of payment until it corrects the situation
24. Why is a cost plus percentage of cost contract bad for the buyer?
- (A) It provides no reason for the seller to control cost
  - (B) It provides no reason for the buyer to control cost
  - (C) It requires the seller to audit all costs incurred
  - (D) It requires use of a more detailed request for proposal (RFP)
25. All the following are advantages of centralized contracting except...
- (A) Lack of career path for contract administrators
  - (B) Career path for contract administrators
  - (C) Contract administrators have teammates for contract-related support
  - (D) Expertise in the contracting area
26. You are the project manager for a tablet distribution project at USD 320. Upon market research, you discover there is only one vendor that can fulfill the requirements. Which of the following should be your biggest concern?
- (A) Pricing is reasonable
  - (B) Supply is available
  - (C) Pricing is reasonable, and supply is reasonable
  - (D) Contract terms are favorable

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27. Your company is working with a staffing company to provide a technical writer for your newest project. The cost is \$75 per hour. The technical writer will work on the project until it is complete, then the contract will end. Which of the following best describes the type of contract typically used in this situation?
- (A) Fixed-price because it lends itself to small initiatives and staff supplementation
  - (B) Time and materials because it ensures that the cost of the writer does not increase during the term of the contract
  - (C) Time and materials because it lends itself to small initiatives and staff supplementation
  - (D) Fixed-price because it ensures that the cost of the writer does not increase during the term of the contract
28. A single-phase medical software project is in the process of closing. There are a number of processes coming together as things finish up. Which of the following is correct?
- (A) Control procurements comes before close project or phase
  - (B) Close project or phase occurs only if the project is completed as planned
  - (C) Close project or phase and control procurements occur at the same time
  - (D) Close project or phase comes before control procurements
29. You are the project manager on a defense project. The buyer wants to get an idea of how much he will pay for cost overruns. With the following variables, calculate the point of total assumption: Expected Cost=\$150,000; Expected Profit=\$37,500; Target Price=\$187,500; Buyer/Seller Share Ratio=60%/40%; Ceiling Price=\$225,000; Maximum Overrun=150%.
- (A) \$201,875.00
  - (B) \$223,125.00
  - (C) \$212,500.00
  - (D) \$191,250.00
30. Which of the following best describes a unilateral contract?
- (A) The seller establishes a price, and the buyer simply has to purchase the item
  - (B) The buyer and seller establish contract parameters during a single negotiation session
  - (C) The buyer establishes a not-to-exceed price for the seller to accept or reject
  - (D) The seller establishes a not-to-exceed price for the buyer to accept or reject

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## 15.7. Project Procurement Management Answers for Tests and Exercises

### 15.7.1. Project Procurement Management Practice Test Answers

We recommend that you download answer sheets from the Crosswind website, so you can practice the test as many times as you like.

1. The project is using a company to provide the technicians for a national network upgrade project. Presently, the buyer is having issues with the seller accomplishing the work of the project according to the contract schedule. The buyer lets the seller know that it is in default for failure to execute per terms of the contract. The buyer also decides to stop payment for work already accomplished until the issue is resolved. What most accurately describes this situation?

**Correct Answer: (C) Both sides appear to be in default of the contract**

Explanation: A seller who fails to perform as defined in the contract is in default of the contract. The buyer choosing to stop payment creates a default situation as well. Two wrongs do not make a right in this case. The buyer is not right in stopping payment just because the other side is in default. The other answers are both accurate, but they are not the best answer. [Crosswind Manual 15.1.5; *PMBOK® Guide* 12.1.1.6]

2. The contract is expected to cost \$560K. Actual cost is \$510K. There is a 50%/50% share of any cost savings. What is the total value of the contract?

**Correct Answer: (A) \$535K**

Explanation: The \$560K is the expected value of the contract and the actual cost of the contract is \$510K, resulting in a savings of \$50K. \$25K of the savings goes to the seller and the other \$25K goes to the buyer. The actual cost of \$510K and \$25K savings share makes the total value of the contract worth \$535K. [Crosswind Manual 15.1.8; No *PMBOK® Guide* Reference]

3. You are the project manager working with the customer on a call center implementation. Your company is responsible for the call center infrastructure. The customer needs some modifications to the scope of the project due to the availability of new functionality. This modification requires that the scope of work to the contract be modified. Who can modify the contract?

**Correct Answer: (B) The contract administrator for the company**

Explanation: The contract administrator for the company is the only person with the authority to change the contract. The project managers from the buyer and the seller will likely have input to the changes, but the contract administrator is the person making those changes to the contract. [Crosswind Manual 15.3.2; No *PMBOK® Guide* Reference]

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4. What type of contract exposes the seller to the most risk when entering into a contract?

**Correct Answer: (D) Fixed-price because there is no provision for increases in the seller's costs**

Explanation: The fixed-price contract has the most risk for the seller because the contract limits the amount that the buyer will pay for the project. The seller must have a detailed understanding of exactly what is needed on the project so it can control cost. Cost plus percentage of cost provides the least risk to the seller. A purchase order provides the seller with no risk because the price for a commodity type item has been established. Time and materials contracts are typically used for smaller amounts of work and staff augmentation. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

5. You are the project manager on an IT outsourcing project. You are currently doing the plan procurement management process. What process will you perform next?

**Correct Answer: (A) Conduct procurement**

Explanation: Conduct procurement follows the plan procurement management process. Control procurement follows conduct procurement. Close procurement and plan solicitation are distracters. [Crosswind Manual 15.2, *PMBOK® Guide* 12.2]

6. You are the project manager for an IT outsourcing project. You are currently doing the plan procurement management process. What is a tool and technique you will use with this process?

**Correct Answer: (B) Make or buy analysis**

Explanation: The make or buy analysis is a tool and technique of the plan procurement management process. The other answers are created as a result of the plan procurement management process. [Crosswind Manual 15.1, *PMBOK® Guide* 12.1.2]

7. You are purchasing 67 desktop computers, monitors, and a standard desktop software package for an upcoming project. What type of contract will you likely use?

**Correct Answer: (D) Purchase order because it is a general purchase vehicle for commodity purchases**

Explanation: The purchase order is a general purchase vehicle for commodity type purchases. Typically, it is for items that are standard, non-customized, and non-negotiable in price. Fixed-price is typically for a detailed, customized, negotiated solution. Net 30 and Net 90 are distracters. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

8. You are the project manager for a computer network installation project. You have a list of all the hardware, software applications, cabling, and various pieces that you will need to complete the installation and setup. What best describes this approach?

**Correct Answer: (B) Design scope of work**

Explanation: The exact description of what is to be done is an example of a design scope of work. Functional would be more of a description that focuses on the result, instead of an exact solution. In the case of functional, there could be a variety of options to fulfill the functionality. Statement of work and requirements documentation are too generic compared to the design scope of work answer. [Crosswind Manual 15.1.10, No *PMBOK® Guide* Reference]

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9. What is the primary mechanism that needs to be in place for a single source noncompetitive procurement?

**Correct Answer: (B) A mechanism that ensures that there is no impropriety or unreasonable pricing**

Explanation: One type of noncompetitive form of procurement is single source, in which a single company is chosen even though others are available. There must be a mechanism in place to ensure there is no impropriety or unreasonable pricing. [Crosswind Manual 15.2.3; No *PMBOK® Guide* Reference]

10. A city is buying services from a construction company to build a new freeway for \$4M over three years. At the start of each year, the amount fluctuates relative to the national cost of living. This is an example of what type of contract?

**Correct Answer: (D) Fixed-price economic price adjust**

Explanation: A fixed-price economic price adjust contract is a contract that generally has a fixed price, but because of contract length, will adjust year-by-year as a neutral economic indicator moves upward or downward. The other answers are distracters. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

11. The project will be using a company to provide the technicians for a national network upgrade project. Presently, the team is in the process of conducting a make-or-buy analysis. What is the primary factor that will influence the team's decision?

**Correct Answer: (C) The comparison of costs between alternatives**

Explanation: Assume, for the exam, that cost comparison is the only factor considered during a make-or-buy analysis. In reality, skill sets, experience, and resource availability are also considered. [Crosswind Manual 15.1.2; *PMBOK® Guide* 12.1.3.2]

12. You have been assigned as a project manager of a computer network installation project. You are currently doing the conduct procurements process. You have just entered into an agreement with a vendor. Which of the following do you need to reference to get to this stage?

**Correct Answer: (D) Source selection criteria**

Explanation: There are several items needed to get to the point of an agreement with a vendor, but the source selection criteria is the only one listed. This provides guidance as to what the buyer is trying to accomplish as a result of the procurement. A contract file is what would be created, as the contract is executed and completed. Change request and project scope statement are distracters. [Crosswind Manual 15.2, *PMBOK® Guide* 12.2]



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13. Your company just completed a make-or-buy decision regarding a new area of development. The project manager and the team will refer to the procurement management plan for guidance in connection with a number of ensuing activities. Which of the following best describes those activities?

**Correct Answer: (C) Establishing which procurement documents are needed, creating the procurement documents, running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, and establishing contracts**

Explanation: Once the buy decision has been made, the procurement management plan is the guidance source for establishing which procurement documents are needed, creating the procurement documents, running bidder conferences or addressing noncompetitive forms of procurement, selecting vendors, and establishing contracts. All the other answers are distracters. [Crosswind Manual 15.2; *PMBOK® Guide* 12.2.2.3]

14. The project utilizes a vendor to provide the technicians for a national network upgrade project. The buyer agrees to pay the vendor an incentive fee. Of the following, which is the most logical reason the buyer would pay the fee?

**Correct Answer: (B) The buyer wants to ensure that the vendor's standard of productivity is aligned to that of the buyer**

Explanation: Incentive fees are used by the buyer to get the seller aligned to a standard of productivity similar to the buyer's. All the other answers are distracters. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

15. You are the project manager on a defense project. The buyer wants to get an idea of how much he will pay for cost overruns. With the following variables, calculate the point of total assumption: Expected Cost=\$125,000; Expected Profit=\$25,000; Target Price=\$150,000; Buyer/Seller Share Ratio=60%/40%; Ceiling Price=\$180,000; Maximum Overrun=130%.

**Correct Answer: (A) \$175,000**

Explanation: The formula for point of total assumption (PTA) is as follows:  
((Ceiling Price - Target Price) / Buyer Share) + Expected Cost  
 $\$175,000 = (\$180,000 - \$150,000) / 0.60 + \$125,000$   
[Crosswind Manual 15.1.9; No *PMBOK® Guide* Reference]

16. The project will be using a company to provide the technicians for a national network upgrade project. The buyer of the solution is providing a design scope of work to the seller. Of the following, which is the most logical reason this scope was selected?

**Correct Answer: (A) The buyer knows exactly what is needed and wants no variance from the specifications**

Explanation: A design scope of work shows specifically what is to be created. The functionality scope of work shows the general functional specifications that the outcome of the project needs to have when complete. The other answers are distracters. [Crosswind Manual 15.1.10; No *PMBOK® Guide* Reference]

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17. Of the following, what best represents a contract component and the reason for including it in a contract between a buyer and vendor in connection with the purchase of a debit card add-on system?

**Correct Answer: (D) Share because the buyer needs the costs to come in as low as possible**

Explanation: A share is a contract component that divides any remaining money between the buyer and the seller. It is normally a negotiated split between the two parties. It is typically different from a traditional incentive fee in that an incentive fee pays compensation based on certain measurable performance metrics that have been established and agreed upon. [Crosswind Manual 15.1.8; No *PMBOK® Guide* Reference]

18. The project will be using a company to provide the technicians for a national network upgrade project. The buyer is providing to the prospective seller a greatly detailed description of what the buyer wants the seller to do on the project. What type of document is being provided to the seller?

**Correct Answer: (B) Request for proposal (RFP)**

Explanation: A request for proposal (RFP) deals with a detailed, very specific approach to a customized solution. A request for information (RFI) deals with finding potential vendors for consideration for proposals or quotes. A request for quote (RFQ) obtains prices from a company for goods or services. An invitation for bid (IFB) is similar to the RFP but typically used in government contracting. [Crosswind Manual 15.1.11; *PMBOK® Guide* 12.1.3.3]

19. A contract is being negotiated with a single source provider that will contain special provisions since the work is being performed at a loss so the provider can gain experience in the market. Of the following, which best represents a special provision?

**Correct Answer: (D) Criteria around which the provider of services can refer to the work**

Explanation: Special provisions are extra items that are added to a contract after negotiations have occurred. Standard terms and conditions are typically part of a template the company will use in a contract and often address payment options, intellectual property rights, and subcontracting. [Crosswind Manual 15.2.8; No *PMBOK® Guide* Reference]

20. You are the project manager for a merger project. You are creating the procurement management plan and revising the procurement strategy. When this is done what process will you perform next?

**Correct Answer: (D) Conduct procurements**

Explanation: Plan procurement management creates among other items, the procurement management plan and procurement strategy. Conduct procurements is the process that follows this process. Control procurements follows conduct procurements. Close procurement and solicitation planning are distracters. [Crosswind Manual 15.2, *PMBOK® Guide* 12.2]

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21. All the following items are requirements of a legal contract except...

**Correct Answer: (B) A purpose for the contract**

Explanation: A contract must have a legal purpose. The other answers are components of a contract. [Crosswind Manual 15.1.5; *PMBOK® Guide* 12.1.1.6]

22. You are the owner of a house painting company. You occasionally have the need for an automated paint sprayer. This tool sells for \$1,250 and costs \$20 a day to maintain. You can rent one for \$150 a day with maintenance included. How many days would you need to use this tool before it makes sense to buy instead of rent?

**Correct Answer: (C) Ten days**

Explanation: To complete this question, solve for the number of days. The number of days is the variable D in the formula.  $\$1,250 + 20D = \$150D$  is the formula. First, move D to one side of the equation. Subtracting  $\$20D$  from both sides gives  $\$1,250 = \$130D$ . Next, divide both sides by 130, which isolates D. That equals 9.6 (rounded up), which means you would need to use the tool for ten full days before it makes sense to buy the tool.

[Crosswind Manual 15.1.4; No *PMBOK® Guide* Reference]

23. The customer is doing a national network upgrade program. The customer has issues with the vendor accomplishing the work in accordance with the schedule set out in the contract. The customer informs the vendor that it is in default for failure to execute per the terms of the contract. A senior manager for the customer suggests stopping payment for work already accomplished, but the procurement department rejects this idea. What most accurately describes this situation?

**Correct Answer: (B) The procurement department's rejection of the senior manager's idea is the best course of action**

Explanation: A company who fails to perform as defined in the contract is in default of the contract. That the vendor is in default is obvious; the customer will only be in default if it stops payment for work already accomplished. [Crosswind Manual 15.1.5; *PMBOK® Guide* 12.1.1.6]

24. Why is a cost plus percentage of cost contract bad for the buyer?

**Correct Answer: (A) It provides no reason for the seller to control cost**

Explanation: In a cost plus percentage of cost contract, the seller is paid a fee that is a percentage of the total cost. As a result of this characteristic of the contract, there is no incentive for the seller to control cost. The other answers are distracters. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

25. All the following are advantages of centralized contracting except...

**Correct Answer: (A) Lack of career path for contract administrators**

Explanation: Centralized contracting provides a functional type of environment for the role, meaning that there is a career path for the person, instead of a lack of career path. The other answers fit the description of advantages for centralized contracting. [Crosswind Manual 15.3.3; No *PMBOK® Guide* Reference]

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26. You are the project manager for a tablet distribution project at USD 320. Upon market research, you discover there is only one vendor that can fulfill the requirements. Which of the following should be your biggest concern?

**Correct Answer: (C) Pricing is reasonable, and supply is reasonable**

Explanation: When there is only one vendor available that could be considered single source or sole source procurement. In this type of situation, you want to make sure that you can get access to enough of the item, for a reasonable price. Contract terms are favorable is a distracter. [Crosswind Manual 15.2.3, No *PMBOK® Guide* Reference]

27. Your company is working with a staffing company for supplementing a technical writer for your newest project. The cost is \$75 per hour. The technical writer will work on the project until it is complete, then the contract will end. Which of the following best describes the type of contract typically used in this situation?

**Correct Answer: (C) Time and materials because it lends itself to small initiatives and staff supplementation**

Explanation: A time and materials contract is typically used for smaller projects or staff augmentation, such as this example. The fixed-price contract has a seller doing work for a set price. The cost plus contract pays a seller costs plus a negotiated fee. The cost plus incentive fee pays a seller costs plus an incentive fee for meeting performance goals. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]

28. A single-phase medical software project is in the process of closing. There are a number of processes coming together as things finish up. Which of the following is correct?

**Correct Answer: (A) Control procurements comes before close project or phase**

Explanation: In a single-phase project, controlling procurements will occur before the phase (or project) is closed out. Close Project or Phase occurs regardless of how the project ends. [Crosswind Manual 15.3; *PMBOK® Guide* 12.1.3.6]

29. You are the project manager on a defense project. The buyer wants to get an idea of how much he will pay for cost overruns. With the following variables, calculate the point of total assumption: Expected Cost=\$150,000; Expected Profit=\$37,500; Target Price=\$187,500; Buyer/Seller Share Ratio=60%/40%; Ceiling Price=\$225,000; Maximum Overrun=150%.

**Correct Answer: (C) \$212,500.00**

Explanation: The formula for point of total assumption (PTA) is as follows:  
((Ceiling Price - Target Price) / Buyer Share) + Target Cost.  
 $\$212,500.00 = ((\$225,000 - \$187,500) / 0.6) + \$150,000$   
[Crosswind Manual 15.1.9; No *PMBOK® Guide* Reference]

30. Which of the following best describes a unilateral contract?

**Correct Answer: (A) The seller establishes a price, and the buyer simply has to purchase the item.**

Explanation: In a unilateral contract, the seller establishes a price and the buyer has the option to purchase at that price. Thus, *uni* means one-sided on the negotiations. The other answers are distracters. [Crosswind Manual 15.1.7; *PMBOK® Guide* 12.1.1.6]