### **Knowledge Assessment**

#### Fill in the Blank

Complete the following sentences by writing the correct word or words in the blanks provided.

- 1. The **earned value metrics** are measurements you can make and compare project-to-project cost and schedule performance.
- 2. One way of interpreting an SPI of .95 is the project is behind schedule .
- 3. <u>Schedule variance (SV)</u> is the difference between the budgeted cost of work performed and the budgetedcost of work scheduled (SV).
- 4. The ratio of performed to scheduled work is the **Schedule Performance Index (SPI)**. .
- 5. <u>Earned value management (EVM)</u> is used to measure the project's progress by giving a more complete picture of overall project performance in relation to both time and cost.
- 6. You specify the <a href="baseline">baseline</a> that you want Microsoft Project to use when calculating the earned value numbers.
- 7. The actual cost (AC)\_is the actual cost incurred to complete each task's actual work up to the statusdate.
- 8. The difference between the budgeted and actual cost of work performed is the variance (CV)
- 9. The ratio of budgeted to actual cost is the Cost Performance Index (CPI)
- 10. When you adjust the remaining work on a task, Microsoft Project evenly\_distributes the work.

#### **Multiple Choice**

*Select the best response for the following statements.* 

- 1. Which of the following is the term that means the same as earned value (EV)?
  - 1. actual cost of work performed (ACWP)
  - 2. budgeted cost of work performed (BCWP)
  - 3. Cost Performance Index (CPI)
  - 4. budgeted cost of work scheduled (BCWS)
- 2. Only a(n) can have a remaining work or duration value.
  - 1. delayed task
  - 2. incomplete task
  - 3. complete task
  - 4. over budget task
- 3. When you enter an actual duration of a task that is longer than the planned duration, Microsoft Project assumes which of the following?
  - 1. The task start date has changed.
  - 2. The project is near done.
  - 3. Entering a larger number does nothing except update the duration.
  - 4. The task is complete.

- 4. Which of the following is the value of the work scheduled to be completed as of the status date?
  - 1. SPI
  - 2. EV
  - 3. PV
  - 4. CPI
- 5. Which dialog box is used to record actual work done on a task?
  - 1. Update Tasks
  - 2. Project Information
  - 3. Task Drivers
  - 4. Task Information
- 6. By default, whenever you enter actual work values, Microsoft Project does which of the following?
  - 1. calculates actual cost values
  - 2. determines estimated cost values
  - 3. predicts the final project end date
  - 4. all of the above
- 7. Which of the following is the term that means the same as budgeted cost of work scheduled (BCWS)?
  - 1. planned value (PV)
  - 2. cost variance (CV)
  - 3. schedule variance (SV)
  - 4. earned value (EV)
- 8. Which of the following is *not* a rule used by Microsoft Project when updating the project schedule based on actual start, finish, or duration values you have entered?
  - 1. When you enter a task's actual start date, Microsoft Project calculates the scheduled finish date to match the actual start date and the task's planned duration.
  - 2. When you enter a task's actual duration that is equal to the scheduled duration, Microsoft Project sets the task to 100% complete.
  - 3. When you enter a task's actual finish date, Microsoft Project moves the scheduled finish date to match the actual finish date and assigns a completion percentage of 100%.
  - 4. When you enter an actual duration for a task that is longer than the scheduled duration, Microsoft Project subtracts the actual duration from the scheduled duration to determine the remaining duration.
- 9. Which of the following is *not* something that must be done in order for Microsoft Project to calculate earned value amounts for a project schedule?
  - 1. save a baseline plan
  - 2. finish at least 50% of the project schedule
  - 3. record actual work on tasks or assignments
  - 4. set a status date (or allow the default of the current date)
- 10. Which of the following is the portion of the budgeted cost that should have been spent to complete each task's actual work performed up to the status date?
  - 1. CPI
  - 2. PV

#### **Competency Assessment**

### **Project 11-1: Recording Actuals for the Office Lunchroom Remodel**

Work has finally started on the lunchroom remodel at your office. You need to update some of the task information to reflect actuals that have been provided to you: Task 12 started one day early but took the scheduled amount of time, and task 13 started on time, but took one day longer to complete.

#### **ONLINE**

The *Office Remodel 11-1* project schedule is available on the book companion website.

GET READY. LAUNCH Microsoft Project.

**OPEN** *Office Remodel 11-1* from the data files for this lesson.

- 1. Click on the name of task 12, **Install drywall**.
- 2. On the Task ribbon, click on the **down arrow** next to the Mark on Track button and then select **Update Tasks**.
- 3. Under the *Actual* label, in the *Start* box, key or select 2/17/19.
- 4. In the *Actual duration* box, key or select **5d** and then click **OK**.
- 5. Select the name of task 13, **Install ceiling grid**.
- 6. Click on the **down arrow** next to the Mark on Track button and then select **Update Tasks**.
- 7. In the Actual duration box, key or select 4d and then click OK.
- 8. SAVE the project schedule as *Office Remodel Actuals* and then CLOSE the file.

**PAUSE.** LEAVE Project open to use in the next exercise.

## Project 11-2: Adjusting Work and Duration of HR Interview Schedule

The HR Interview project is nearly half complete. You now need to adjust the remaining work and duration of some of the tasks.

The *HR Interview Schedule 11-2* project schedule is available on the book companion website.

GET READY. OPEN HR Interview Schedule 11-2 from the data files for this lesson.

- 1. On the View tab, click the **Tables** button and then click the **Tracking** table.
- 2. Select the **Remaining duration** cell for task 11, Select candidates to interview...
- 3. Key **2.5d** in the cell and press **Enter**.
- 4. Key **100** in the % Comp. column for task 11.
- 5. On the ribbon, switch to the **Task Usage** view and display the **Work** table.
- 6. Click on the name of task 12, **Prepare interview questions**, and then click the Task tab.
- 7. Click the **Scroll to Task** button on the Task ribbon.
- 8. On the ribbon, mark this task as 100% complete.
- 9. Select the **Remaining duration** cell for task 12, key **24**, and then press **Enter**.
- 10. SAVE the project schedule as HR Interview Adjusted and then CLOSE the file.

PAUSE. LEAVE Project open to use in the next exercise.

### **Proficiency Assessment**

## Project 11-3: Adjusting Remaining Work for the Office Lunchroom Remodel

You are about to begin the finishing work of your office lunchroom remodel. You are told by the painting crew they can complete this in five days. This is great news because the project deadline is in jeopardy. You already missed the ceiling tile deadline and you certainly do not want to miss another one.

The *Office Remodel 11-3* project schedule is available on the book companion website.

**GET READY. OPEN** *Office Remodel 11-3* from the data files for this lesson.

- 1. Notice that there is a deadline warning indicator in the Indicators column for task 20.
- 2. On the View ribbon, select the **Task Usage** view.
- 3. Use the **Tables** button to display the Work table.
- 4. Select **task 16** and adjust the remaining work hours to 60.
- 5. Return to the Gantt Chart view; note the duration of task 12 is now five days and the missing deadline icon indicator is now gone from task 20.
- 6. **SAVE** the project schedule as *Office Remodel Painting Adjusted* and then **CLOSE** the file.

**PAUSE.** LEAVE Project open to use in the next exercise.

### **Project 11-4: Updating the Earned Value Analysis**

More time has passed since you performed your previous earned value analysis on the Tailspin Remote Drone project, and additional tasks have been completed. You need to set a new status date and display the Earned Value table.

The *Tailspin Remote Drone 11-4* project schedule is available on the book companion website.

GET READY. OPEN *Tailspin Remote Drone 11-4* from the data files for this lesson.

- 1. On the Project tab, set a status date of 5/24/19.
- 2. Change the view to the Task Sheet view.
- 3. Apply the Earned Value table from the More Tables dialog box.
- 4. Insert the SPI and CPI columns to the left of the Planned Value PV column.
- 5. Auto-fit all the columns.
- 6. Click on the name of task 42 and scroll your task list so that task 42 is visible in the middle of your screen.
- 7. SAVE the project schedule as *Remote Drone Earned Value* and then CLOSE the file.

PAUSE. LEAVE Project open to use in the next exercise.

#### **Mastery Assessment**

### **Project 11-5: Rescheduling Work on the Insurance Claim Process**

On your Insurance Claim Process project, you have just been informed that there will be a delay in making repairs. Work has started but cannot continue because a part is back-ordered and will not arrive at the body shop until March 29, 2019.

The *Insurance Claim Process 11-5* project schedule is available on the book companion website.

**GET READY. OPEN** *Insurance Claim Process 11-5* from the data files for this lesson.

- 1. Update task 41 to show that work is 50% complete.
- 2. Reschedule remaining work on just task 41 to start after 4/1/19.
- 3. Go to the Gantt Chart view, select task 41, and select Scroll to Task.
- 4. SAVE the file as *Insurance Claim Process Reschedule* and then CLOSE the file.

**PAUSE.** LEAVE Project open to use in the next exercise.

# Project 11-6: Adjusting Remaining Work and Duration on Tailspin Remote Drone Tasks

You now have more actuals to enter into the Tailspin Remote Drone project schedule. Update the work (as provided below) in the Work table of the Task Usage view.

The Tailspin Remote Drone 11-6 project schedule is available on the book companion website.

GET READY. OPEN Tailspin Remote Drone 11-6 from the data files for this lesson.

- 1. Mark task 50 as complete.
- 2. For task 51, Marketing strategy development, 24 hours of actual work have been completed and 0 hours of work are remaining.
- 3. For task 52, Marketing plan development and approval, 12 hours of actual work have been completed and 8 hours of work are remaining.
- 4. SAVE the project schedule as *Remote Drone Adjusted* and then CLOSE the file.

**CLOSE** Project.