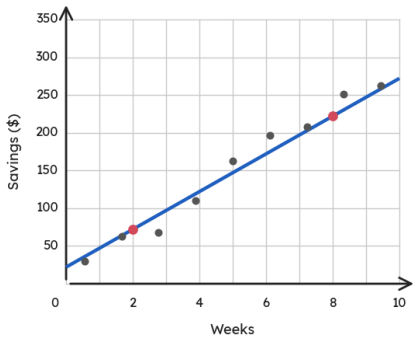
Name: _____ Date: _____

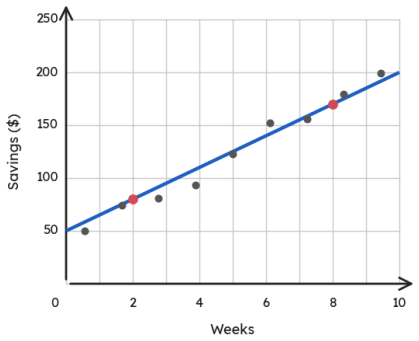
Constructing Linear Models - Medium

The line of fit passes through the two marked points. Write its equation, then use it to make the prediction.

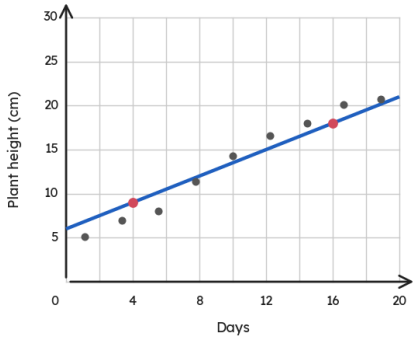
1. Points: (2, 72) and (8, 222). Predict y when x = 11.



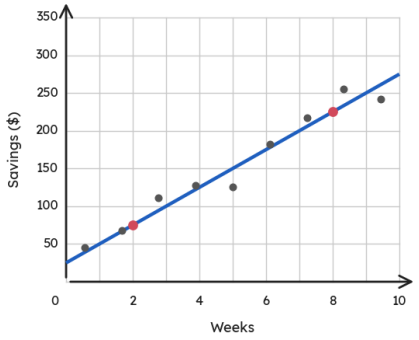
2. Points: (2, 80) and (8, 170). Predict y when x = 11.



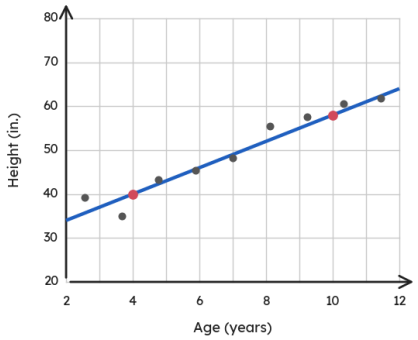
3. Points: (4, 9) and (16, 18). Predict y when x = 22.



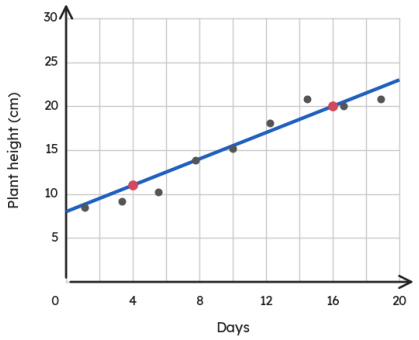
4. Points: (2, 75) and (8, 225). Predict y when x = 12.



5. Points: (4, 40) and (10, 58). Predict y when x = 15.



6. Points: (4, 11) and (16, 20). Predict y when x = 11.

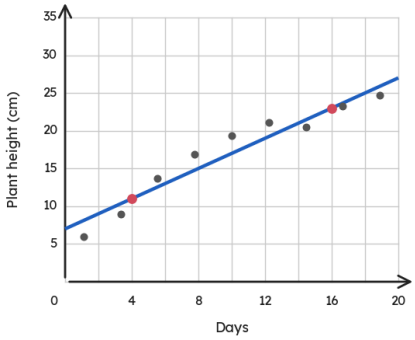


Name: _____ Date: _____

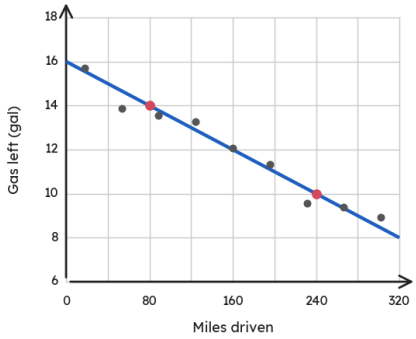
Constructing Linear Models - Medium

The line of fit passes through the two marked points. Write its equation, then use it to make the prediction.

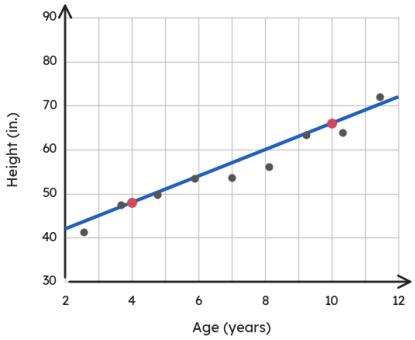
7. Points: (4, 11) and (16, 23). Predict y when x = 11.



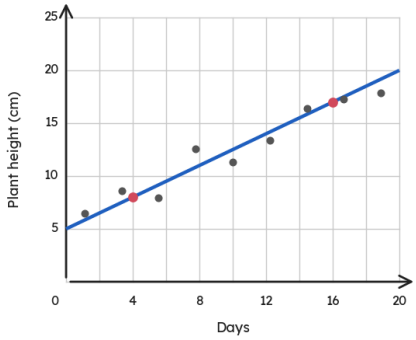
8. Points: (80, 14) and (240, 10). Predict y when x = 360.



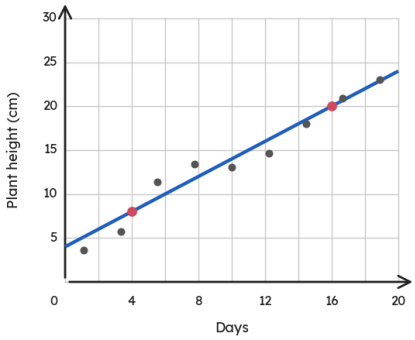
9. Points: (4, 48) and (10, 66). Predict y when x = 13.



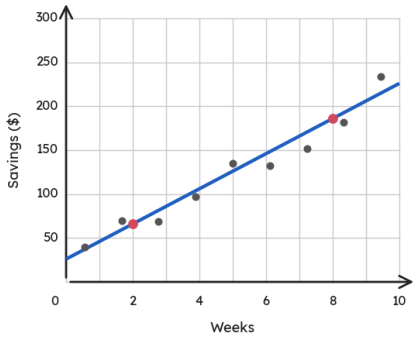
10. Points: (4, 8) and (16, 17). Predict y when x = 7.



11. Points: (4, 8) and (16, 20). Predict y when x = 13.

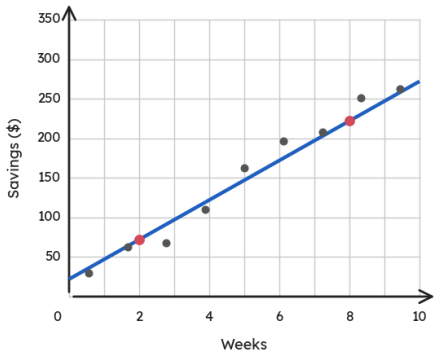


12. Points: (2, 66) and (8, 186). Predict y when x = 14.



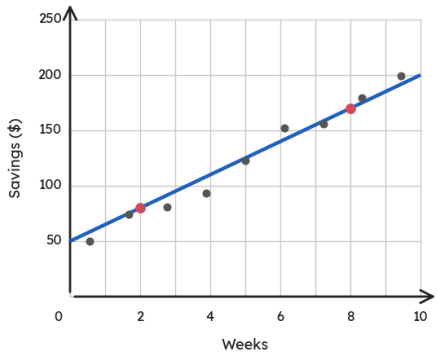
Constructing Linear Models - Medium - Answer Key

1. Points: (2, 72) and (8, 222). Predict y when x = 11.



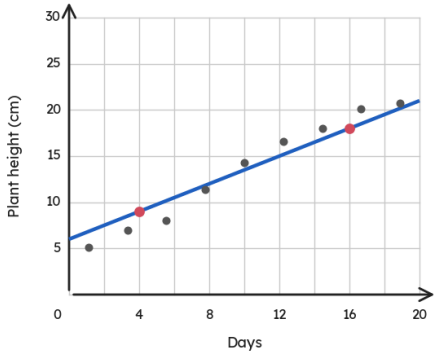
y = 25x + 22; y = 297

2. Points: (2, 80) and (8, 170). Predict y when x = 11.



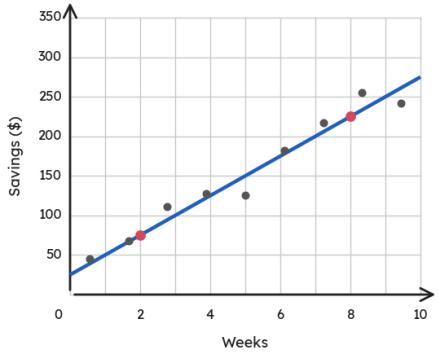
y = 15x + 50; y = 215

3. Points: (4, 9) and (16, 18). Predict y when x = 22.



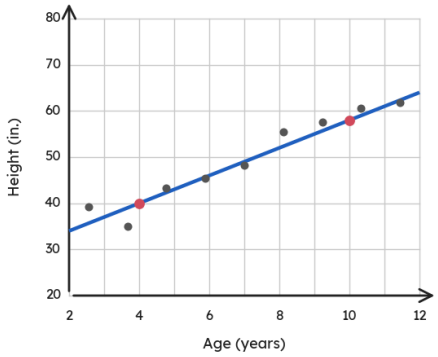
y = (3/4)x + 6; y = 22.5

4. Points: (2, 75) and (8, 225). Predict y when x = 12.



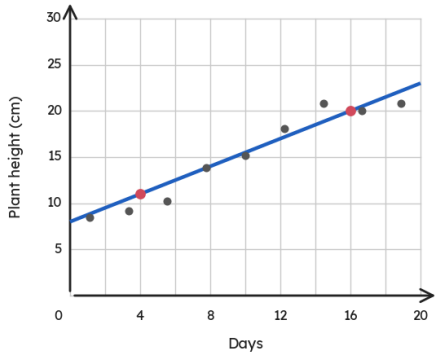
y = 25x + 25; y = 325

5. Points: (4, 40) and (10, 58). Predict y when x = 15.



y = 3x + 28; y = 73

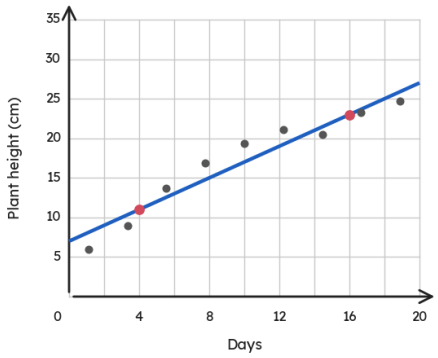
6. Points: (4, 11) and (16, 20). Predict y when x = 11.



y = (3/4)x + 8; y = 16.25

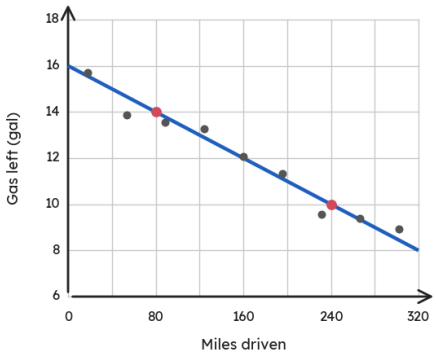
Constructing Linear Models - Medium - Answer Key

7. Points: (4, 11) and (16, 23). Predict y when x = 11.



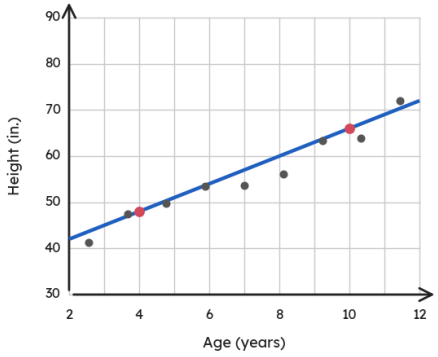
y = x + 7; y = 18

8. Points: (80, 14) and (240, 10). Predict y when x = 360.



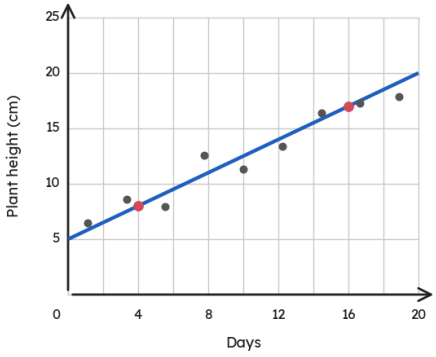
y = (-1/40)x + 16; y = 7

9. Points: (4, 48) and (10, 66). Predict y when x = 13.



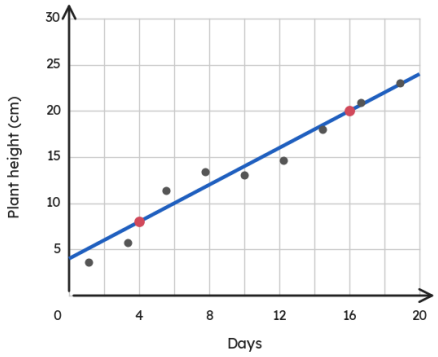
y = 3x + 36; y = 75

10. Points: (4, 8) and (16, 17). Predict y when x = 7.



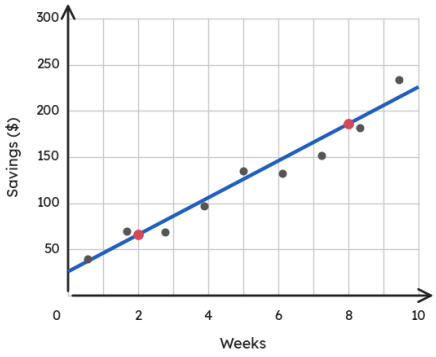
y = (3/4)x + 5; y = 10.25

11. Points: (4, 8) and (16, 20). Predict y when x = 13.



y = x + 4; y = 17

12. Points: (2, 66) and (8, 186). Predict y when x = 14.



y = 20x + 26; y = 306