

Review problems:

Solve each equation by factoring. Check your solution(s) for #1 only by substitution.

1) $v^2 = -12 + 7v$

2) $-7 - 42m = 4m - 21m^2$

3) $5n^2 - 13n - 4 = 2$

Answers:

1) $v = 4$ or 3

2) $m = -\frac{1}{7}$ or $\frac{7}{3}$

3) $n = -\frac{2}{5}$ or 3

Find each product & check.

4) $(7n - 2)^2$

5) $(3x + 4)(3x + 1)$

6) $(3a - 3)(5a^2 + 7a + 5)$

Answers:

4) $49n^2 - 28n + 4$

5) $9x^2 + 15x + 4$

6) $15a^3 + 6a^2 - 6a - 15$

Simplify the expression.

$$7) (4 + 5m^4 + 3m^3) - (6m^3 - 1 + 3m^4)$$

Answer:

$$7) 2m^4 - 3m^3 + 5$$

Factor each completely.

$$8) n - 18n^2 + 3n^3 - 6$$

$$9) 16n^2 - 9$$

$$10) 16m^2 - 40m + 25$$

$$11) 32b^2 - 2$$

Am I also solving? Why or why not?

Answers:

$$8) (3n^2 + 1)(n - 6)$$

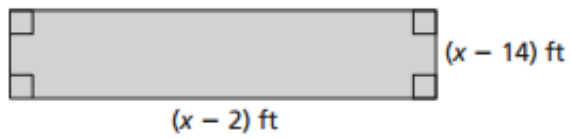
$$9) (4n + 3)(4n - 3)$$

$$10) (4m - 5)^2$$

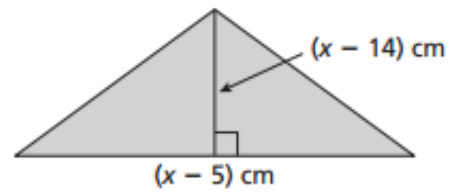
$$11) 2(4b + 1)(4b - 1)$$

In Exercises 15 and 16, find the dimensions of the polygon with the given area.

15. Area = 45 ft^2



16. Area = 35 cm^2



*Be sure to check your answer.

Answers:

15) 15 ft by 3 ft

16) 14 cm (base), 5 cm (height)