

**Homework 26.2**

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**Divide.**

1)  $(18r^6 + 2r^5 + 6r^4) \div 6$

2)  $(2a^4 + 18a^3 + 5a^2) \div 9a^2$

3)  $(8x^3 + 8x^2 + 32x) \div 8x^3$

4)  $(10n^4 + 5n^3 + 40n^2) \div 10n^3$

**Factor the greatest common factor out of each expression.**

5)  $-14y^4x^2 + 20y^2 + 20y$

6)  $-56x^3y^3 + 49xy + 42x$

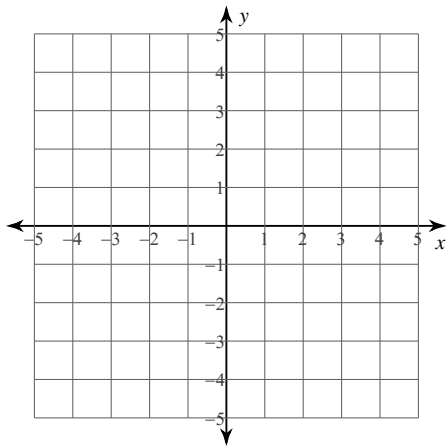
7)  $100m^3n^5 - 90m^3n^2 + 40m^3n$

8)  $24x^3y^7 - 18x^3y^4 + 60xy$

**Solve each system by graphing.**

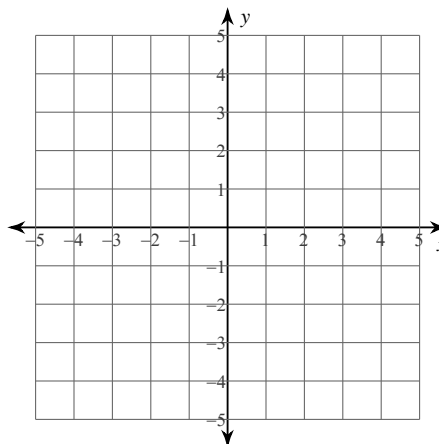
9)  $x = 4$

$$y = -\frac{1}{2}x + 1$$



10)  $y = -\frac{1}{3}x + 1$

$$y = -\frac{4}{3}x - 2$$



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- 11) How old am I if 400 reduced by 3 times my age is 220?

- 12) Aliyah won 64 pieces of gum playing the bean bag toss at her school's game night. Later, she gave three to each of her friends. She only has 4 remaining. How many friends does she have?

### Answers to Homework 26.2

- 1)  $3r^6 + \frac{r^5}{3} + r^4$       2)  $\frac{2a^2}{9} + 2a + \frac{5}{9}$       3)  $1 + \frac{1}{x} + \frac{4}{x^2}$       4)  $n + \frac{1}{2} + \frac{4}{n}$   
5)  $2y(-7x^2y^3 + 10y + 10)$       6)  $7x(-8x^2y^3 + 7y + 6)$       7)  $10m^3n(10n^4 - 9n + 4)$   
8)  $6xy(4x^2y^6 - 3x^2y^3 + 10)$       9)  $(4, -1)$       10)  $(-3, 2)$

11) 60

12) 20