Practice 1.3.1 A: Identifying Terms, Factors, and Coefficients, p. U1-100

1. terms: $12a^3$, 16a, 4 factors: 12 and a^3 , 16 and a

coefficients: 12, 16

constant term: 4

2. terms: $6x^2$, 3x, 9

factors: 6 and x^2 , 3 and x

coefficient: 6, 3

constant term: 9

3. expression: ((x + y)/2) - y/3 = (1/2)x + (1/6)y

terms: (1/2)x, (1/6)y

factors: 1/2 and x, 1/6 and y

coefficients: 1/2, 1/6

constant term: none

4. expression: $5x^3 + (6 - x^3) = 4x^3 + 6$

terms: $4x^3$, 6

factors: 4 and x^3

 ${\it coefficient:}\ 4$

constant term: 6

5. Answers may vary. Sample answer: $3x^3 + 6x^2 + 9x + 4$

6. expression: 6x - 0.15(6x) = 5.1x

term: 5.1*x*

factors: 5.1 and x

coefficient: 5.1

constant term: none

7. expression: 10x - 0.20(10x) + 3.99 = 8x + 3.99

terms: 8x. 3.99

factors: 8 and x

coefficient: 8

constant term: 3.99

8. expression: (30.24 - 2.24)/(x + 1) = 28/(x + 1)

term: 28/(x+1)

factors: 28 and 1/(x + 1)

coefficient: 28

constant term: none

9. expression: $1/2(b_1 + b_2)h$ or $1/2(b_1)h + 1/2(b_2)h$

terms: $1/2(b_1)h$, $1/2(b_2)h$

factors: 1/2, b_1 , h and 1/2, b_2 , h

coefficients: 1/2, 1/2

constant term: none

10. expression: $2\pi r^2 + 2\pi rh$

terms: $2\pi r^2$, $2\pi rh$

factors: 2, π , r^2 and 2, π , r, h

coefficients: 2π , 2π

constant term: none

Practice 1.3.1 B: Identifying Terms, Factors, and Coefficients, p. U1-102

1. terms: $14x^2$, 2x, -9

factors: 14 and x^2 , 2 and x

coefficients: 14, 2

constant term: -9

2. terms: 13*x*, 20

factors: 13 and x

coefficient: 13

constant term: 20

3. terms: $(4x^3)/5$, 9x

factors: 4/5 and x^3 , 9 and x

coefficients: 4/5 and 9

constant term: none

4. expression: $(x^2)/3 + 4$

terms: $(x^2)/3$, 4

factors: x^2 , 1/3

coefficient: 1/3

constant term: 4

5. expression: $x^6 + 3x$

6 -

terms: x^6 , 3x

factors: 3 and x

coefficient: 3

constant term: none

6. Answers may vary. Sample answer:

$$12x^4 + 15x^3 + 18x^2 - 21x + 3$$

7. expression: 2x + 0.05(x) = 2.05x

terms: 2.05x

factors: 2.05 and x

coefficient: 2.05

constant term: none

8. expression: 4x - 0.15(4x) + 4.85 = 3.4x + 4.85

terms: 3.4x, 4.85

factors: 3.4 and x

coefficient: 3.4

constant term: 4.85

9. expression: x + x + (x - 4) + (x - 4) = 2(x) + 2(x - 4) = 4x - 8

terms: 4x, -8

factors: 4 and x

coefficient: 4

constant term: -8

10. expression: 5/9(F-32) = (5/9F) - (160/9)

terms: 5/9(F), -160/9

factors: 5/9 and F

coefficient: 5/9

constant term: -160/9