TKH Module 7

Section 1

- Practice 2

  A. 1. base = 1000   part = 200   rate = 20%

  2. base = 80   part = 72   rate = 90%

  3. base = 13700   part = 2740   rate = 20%

  4. base = 2000   part = 500   rate = 25%

  5. base = 40   part = 60   rate = 150%

  B. 11. A   12. D

- Practice 3.1

  A. 1. $5   2. 180   3. 140

  4. 95%   5. 25%

  B. 18. B   19. D   21. A

- Practice 3.2

  A. 1. 175   2. 280   3. 6.4

4. 200   5. 30

B. 20. C   21. B

- Practice 6

A. 1. 50%   2. 37.5%

    3. 200% 4. 45% 5. 20%

B. 14. C   15. B

Section 2

- Practice 1.1

A. 1. $x - 7$ 2. $3x^2 + x$ 3. $8x - 10$

  4. $-3x - 2y$ 5. $\frac{10}{x} - 5$ 6. $7x - 8$

  7. $16x + (x - 3y)$ 8. $x^2 + x^4$ 9. $x^2 + \frac{4}{7}$

    10. $15 + \sqrt{x} - 6$

B. 21. B

- Practice 1.2
  A. 1. $x^2 + 3x + 2$ 2. $19y + 13$

  3. $-3x + 54$ 4. $6x^3 + 37x^2 + 4$

  5. $4y + 32 + 3y - 18$

     $7y + 14$

  C. 23. A

- Practice 3
  A. 1. monomial   2. monomial   3. binomial

  4. trinomial   5. binomial   6. trinomial

  7. monomial   8. monomial   9. monomial

  10. binomial

  B. 16. Coeff: 3, -2   variables: x^4, x^2

       Constant: 3

  17. Coeff: 12   variables: a^2, b, c

18. Coeff: 3, -4   variables: g, h

19. variables: x^2, y

20. Coeff: -4, -3   variables: a, b^2, c

21. constant: 25

22. Coeff: 4, 3   variables: x^2, x

    constant: -7

23. Coeff: 5/8   variable: x

24. constant: $\sqrt{25}$

C. 31. B   32. B

- Practice 4

  A. 1. like   2. like   3. unlike
      4. unlike   5. like   6. unlike
      7. unlike   8. like   9. unlike

      10. unlike

- Practice 5

A. 1. $5x + 6$ 2. $21y + 2y + 6$

3. $8x^2 - 5x + 2$ 4. $15a^2 + 8a$

5. $11x^2 + 2x + 3$

• Practice 6

A. 1. $30x^2$ 2. $6xy^2$ 3. $28ab^2c^2$

4. $12yz$

B. 9. $18xyz^2 + 12z^3$ 10. $42x^2 - 36x2$

11. $-15ab^2 - 55abc$ 12. $-18f^3h + 24f^4gh^2$

C. 17. $x^2 - x - 30$ 18. $x^2 + 2xy + y^2$

D. 25. A

• Practice 7

A. 1. $y + 15$ 2. $x + 3$ 3. $x + 5$

4. $a + b$ 5. $x^2 + 2x$

B 13. $6x + 2$ 14. $5x + 3$

15. $8y + 2$ 16. $6y + 7$ 17. $2y + 2$

Section 3

- Practice 1.1
  A. 1. $x = 9$ 2. $m = 28$ 3. $y = -1$
      4. $x = -64$ 5. $a = 125$ 6. $y = -13$
      7. $x = 27$ 8. $c = 7$ 9. $x = -4$
      10. $b = -7$

- Practice 1.2
  A. 1. $x = 50$ 2. $y = -2$ 3. $m = 2$
      4. $x = -4$ 5. $y = 6$

- Practice 2
  A. 1. $x + 2x - 1000 = 4400$
          $3x = 5400$
          $x = 1800$ sq.ft.

      2. $0.1x + 0.25(24-x) = 4.50$

$$0.1x + 6 - 0.25x = 4.50$$

$$-0.15x = -1.5$$

$$x = 10 \text{ dimes}$$

3. $\quad 3x = 36$

$$2x = 24 \text{ games}$$

4. $\quad x + x+2 + x+4 + x+6 = 212$

$$4x + 12 = 212$$

$$x = 50$$

$$x+4 = 54$$

5. $\quad 6x + 4y = 62$

$$x + y = 13$$

$$x = 13 - y$$

$$6(13-y) + 4y = 62$$

$$78 - 6y + 4y = 62$$

$$-2y = -16$$

$$y = 8$$

- Practice 3

A. 1. C   2. $3b + b + b - 50 = 950$

$$5b = 1000$$
$$b = \$200$$

C

3. $2s + s + 3s = 15$

$$6s = 15$$
$$2s = 5$$

C

4. $2s + 6 = 170$

$$2s = 164$$
$$s = 82$$

B

5. $n = 2m$

$n - 6 = 5(m-6)$

$n - 6 = 5m - 30$

$n = 5m - 24$

$2m = 5m - 24$

$24 = 3m$

$m = 8$

$n = 16$

B

• Practice 4

A. 1. $(-4,5)$ 2. $(3,6)$ 3. $(0,-3)$

   4. $(6,-7)$ 5. $(-5,0)$ 6. $(-6,-4)$

   7. $(2,0)$ 8. $(7,-2)$

• Practice 5

A. 1. $y = 2, 3, 4$ 2. $y = 1, 0, -1$

   3. $y = 2, -1, -4$ 4. $y = 3, 1, -1$