


ANSWER KEYS

Chapter 3:

1. a) 15,341; b) -92; c) -52; d) -7
2. a) -41; b) 1109; c) 12; d) -15
3. a) -3; b) -2; c) 3479; d) -19
4. a) 0; b) 48; c) -80; d) 141,783
5. a) -8; b) 6; c) 213 R3; d) 62 R8
6. $3 \cdot 5 + 3 \cdot 8 = 15 + 24 = 39$
7. $5 \cdot 6 - 5 \cdot 4 = 30 - 20 = 10$
8. $-2 \cdot 3 + (-2) \cdot (6) = -6 + (-12) = -18$
9. $-4 \cdot 8 - 4 \cdot (-3) = -32 + 12 = -20$
10. a) 10; b) -421; c) 2; d) 108
11. $x + 11$
12. $4x - 5$
13. $62 - x$
14. $-9x$
15. $6x + 3$
16. $2x - 7$

Chapter 4:

1. a) 1493; b) -24; c) -11; d) -13; e) -4; f) 12
2. a) 2527; b) 10; c) -12; d) -56; e) -5; f) -14
3. a) 11,501; b) 60; c) -42; d) 144
4. a) -23; b) -6; c) undefined; d) 358
5. 
6. a) <; b) =; c) >
7. 15
8. 4
9. -2
10. 108
11. -4
12. -2
13. -8
14. -72
15. 11
16. -1
17. -9
18. 1

Chapter 5:

1. a) thousands place; b) tens place
2. a) three thousand seventy-two
b) one hundred thirty-five thousand sixty
3. a) 48,032; b) 7,006
4. a) 2,600; b) 320,000; c) 4,280 d) 37,000
5. a) $\frac{8}{5}$; b) $\frac{-6}{15}$; c) $\frac{6}{25}$; d) $\frac{3}{13}$
6. a) -16,418; b) -100; c) -4; d) $\frac{1}{10}$
7. a) -20; b) 826,000; c) $\frac{-1}{60}$; d) 505
8. $54x + 23$
9. $-15x + 40$
10. $3x + 15$
11. $-4a - 12$
12. 7
13. 7
14. $\frac{1}{2}$
15. -3

Chapter 6:

1. a) $\frac{8}{9}$; b) $\frac{-6}{7}$; c) $-\frac{10}{13}$; d) $\frac{2}{3}$
- 2) a) yes; b) no
3. $\frac{2}{5}$
4. $\frac{4}{15}$
5. $\frac{3}{8}$ were injury-related; $\frac{5}{8}$ were not
6. a) $-\frac{2}{3}$; b) 15; c) $\frac{2x}{7}$; d) 9; e) -3.22; f) -0.3
7. 0.95
8. $-\frac{4}{3}$
9. $-\frac{5}{18}$
10. 3.5
11. 1.2
12. -0.144

ANSWER KEYS

Chapter 7:

1. $\frac{12}{25}$
2. $\frac{11}{40}$
3. $12\frac{2}{5}$
4. $-\frac{9}{50}$
5. a) 79.540; b) 0.4; c) 3.83; d) 253
6. 0.28
7. -0.375
8. 0.417
9. 0.636
10. -3.6
11. 0.45
12. a) 3.62; b) 0.0045; c) 0.0125; d) 102
13. 5
14. 12
15. 27
16. 20
17. 416 items
18. Amount paid: \$4000; amount owed: \$2400