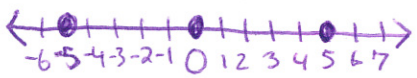
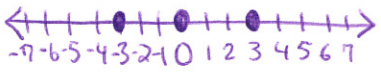
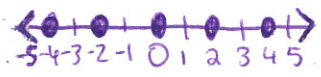
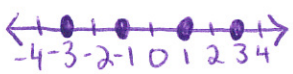
Homework Answer Key **Course 3 Lesson # 1**

1. 	**2.** $-5, -2, 1, 3$	**3.** $\{0, 1, 2, 3, 4, \ldots\}$
4. $\{\ldots, -4, -2, 0, 2, 4, \ldots\}$	**5.** -2	**6.** 0 (zero)
7. $\ldots, -4, -2, 0, 2, 4, \ldots$	**8.** the set of even integers	**9.** False. Zero is a whole #, but not a counting #
10. True, the whole #s include all the counting #s.	**11.** True; integers include counting #s, their opposites, and zero.	**12.** 21
13. 13	**14.** 0 (zero)	**15.** $5 > -7$ (greater than)
16. $-3 < -2$ (less than)	**17.** $\lvert -3 \rvert > \lvert -2 \rvert$ (greater than)	**18.** 
19. 5 and -5	**20.** 5 and -5	**21.** 
22. 3 and -3	**23.** 	**24.** -10
25. 0 (zero)	**26.** 2	**27.** 0 (zero)
28. C. Integers	**29.** A. counting (natural) #s B. whole #s C. integers	**30.** D. None of these

Homework Answer Key **Course 3 Lesson # 2**

1. 75	**2.** 4	**3.** $30-20=10$ $30-10=20$
4. $200 \div 20 = 10$ $200 \div 10 = 20$	**5.** a. $17 \cdot (25 \cdot 4)$ b. 1700 c. commutative property $(17 \cdot 25) \cdot 4$; associative $17 \cdot (25 \cdot 4)$	**6.** $\{1, 2, 3, \ldots\}$
7. $\{0, 1, 2, 3, \ldots\}$	**8.** $\{\ldots, -2, -1, 0, 1, 2, \ldots\}$	**9.** False. Zero is a whole # but not a counting #
10. True; integers include all the counting #s	**11.** $-3, -2, 0, 1, 4$	**12.** a. 12 b. 11
13. Identity Property of Multiplication	**14.** Identity Property of Addition	**15.** Zero Property of Multiplication
16. Associative Property of Addition	**17.** Commutative Property of Multiplication	**18.** a. Addition, Subtraction, Multiplication, Division b. subtraction and division
19. 10 and -10	**20.** a. $0 > -1$ b. $-2 > -3$ c. $\lvert -2 \rvert < \lvert -3 \rvert$	**21.** 
22. -20	**23.** 0 (zero)	**24.** A. Counting (natural) #s B. Whole #s C. integers
25. C. Integers	**26.** D. none of these	**27.** 4,164
28. -4164	**29.** 38,220	**30.** 203

Homework Answer Key **Course 3 Lesson # 3**

1. Comparing 5min 8sec − 4min 55sec = d 13 seconds	**2.** Combining $20 + $25 + $30 = t $75	**3.** Separating 12in. − a = 8in. 4 inches
4. Combining $15 + m = $32 $17	**5.** Comparing 132 − 123 = d 9 pages	**6.** Separating 12 − 2 = d 10 eggs
7. Sample: Eric had $10 in his wallet. He spent $4.05 on ice cream. How much does he have left?	**8.** 3, −3	**9.** −6, −4, −2, 3, 5
10. a. −5 < 1 b. −1 > −2	**11.** a. −10 < 10 b. |−10| = |10|	**12.** = (equal)
13. a. 12 b. 6 and 4	**14.** a. 5 b. 2 and 3	**15.** a. (4 · 25) · 37 b. 4 · (25 · 37) commutative (4 · 25) · 37 associative c. 3700
16. 19 > −19	**17.** 5 + 12 = 12 + 5	**18.** (2+3)+5 = 2 + (3+5) one possibility
19.  	**20.** −5	**21.** 3 + 6 = 9 9 − 6 = 3 9 − 3 = 6
22. 4 · 2 = 8 $\frac{8}{4} = 2$ $\frac{8}{2} = 4$	**23.** 0 (zero)	**24.** 5
25. t = 1 Identity Property of Multiplication	**26.** u = 0 Identity Property of Addition	**27.** x = 0 Zero Property of Multiplication
28. $9.10	**29.** $59.63	**30.** $4.01

Homework Answer Key **Course 3 Lesson # 4**

1. 7 members	**2.** 60 eggs	**3.** 6 markers Since $6 \times 800m = 4800m$, it is reasonable that 6 markers will be used. (Trail is not long enough for a 7th marker at 5600m)
4. B. $C = 3 \times \$1.98$	**5.** 4 buses. 3 buses can only hold 180 people so another bus is needed (it will not be full)	**6.** 9 cm
7. $24	**8.** 8 hours	**9.** Jason had $5 and bought a carton of strawberries. He left with $1.50 in his wallet. How much did the carton cost? (SAMPLE)
10. Emily spent $125 on tickets for a concert. The tickets cost $25 each. How many tickets did she buy? (SAMPLE)	**11.** $-4, -3, -1, 2, 5$	**12.** a. $-7 > -8$ b. $5 > -6$
13. a. $\lvert -7 \rvert < \lvert -8 \rvert$ b. $\lvert 11 \rvert = \lvert -11 \rvert$	**14.** 7 and -7	**15.** 1 and -1
16. $\{\ldots, -3, -1, 1, 3, \ldots\}$	**17.** 	**18.** a. 6 and 5 b. 4
19. a. 8 b. 10	**20.** a. $(3+17)+28$ b. $3+(17+28)$ Commutative Prop of addition $(3+17)+28$ associative prop. of addition	**21.** $7 > -7$
22. $7 \cdot 3 = 21$ $\frac{21}{3} = 7 \quad \frac{21}{7} = 3$	**23.** $4+2=6$ $6-4=2$ $6-2=4$	**24.** -10
25. 4 groups of 20	**26.** 48in. to 59in	**27.** 20 tickets for $6 each
28. $\{0, 1, 2, 3, \ldots\}$	**29.** integers	**30.** $\frac{1}{2}$ and $-\frac{1}{2}$

Homework Answer Key **Course 3 Lesson # 5**

1. 440 yards	**2.** $\frac{2}{5}, \frac{2}{4}, \frac{2}{3}$	**3.** 400 fans
4. 32 words per minute	**5.** 264 rolls	**6.** 350 minutes
7. 14 boxes can be filled	**8.** $246	**9.** 6,000 voters
10. A. $c = 19 \cdot \$2.98$	**11.** $10	**12.** $8
13. It took James 20 seconds to fold + stuff a letter into an envelope. How long would it take him to fold + stuff 3 letters?	**14.** Michelle bought a 10-lb. bag of dog food. After 2 weeks, there were 3 lbs. left. How many lbs. of food did her dog eat?	**15.** 13 mL
16. -5, -3, 0, 4, 7	**17.** $\frac{1}{2} > \frac{7}{15}$	**18.** 6 and -6
19. Sample: $1+5$; $2+4$	**20.** Sample: $2 \cdot 3$; $1 \cdot 6$	**21.** Sample: $(2 \cdot 3) \cdot 4 = 2 \cdot (3 \cdot 4)$
22. 	**23.** 50 and -50	**24.** $10-4=6$ $4+6=10$ $6+4=10$
25. $5 \cdot 6 = 30$ $30 \div 6 = 5$ $30 \div 5 = 6$	**26.** 0 (zero)	**27.** $-8 < -6$
28. True. Integers include all counting #s.	**29.** False. The fraction $\frac{1}{2}$ is not an integer.	**30.** $6 \cdot (17 \cdot 50)$ Given $6 \cdot (50 \cdot 17)$ Commutative prop. $(6 \cdot 50) \cdot 17$ Associative Prop. $300 \cdot 17$ multiply $6 \cdot 50$ 5100 multiply $300 \cdot 17$