# Saxon Math Course 2 Summer Answer Key

## Practice Set 1

| | |
|---|---|
| a) | $0.45 per glass or 45¢ per glass |
| b) | 0 |
| c) | 2 |
| d) | $5.35 |
| e) | $1.53 |
| f) | $3.25 |
| g) | 6000 |
| h) | $4.80 |
| i) | 13 |
| j) | 24 |
| k) | 16 |
| l) | 80 |
| m) | 5 |
| n-s) | Answers will vary |

| | |
|---|---|
| 2) | 17 |
| 4) | 3 |
| 6) | a. 16 b. 8 c. 48 d. 3 |
| 8) | 2368 |
| 10) | 1292 |
| 12) | 5688 |
| 14) | 12,000 |
| 16) | 309 |
| 18) | 30 R17 |
| 20) | $7.66 |
| 22) | $200.00 |
| 24) | 40 |
| 26) | Natural Numbers |
| 28) | All Counting numbers are whole numbers. |
| 30) | Minuend - subtrahend = difference |

## Practice Set 2

| | |
|---|---|
| a) | The additive identity is zero. The multiplicative identity is 1. |
| b) | Division |
| c) | $(x + y) + z = x + (y + z)$<br>Numerical answers may vary |
| d) | Commutative Property of multiplication |
| e) | 12 |
| f) | 12 |
| g) | 2 |
| h) | 8 |
| i) | 60 |
| j) | 60 |
| k) | 1 |
| l) | 4 |
| m) | Step 1: Commutative Property of Multiplication<br>Step 2: Associative Property of multiplication<br>Step 3: Multiplied 5 by 2<br>Step 4: Multiplied 10 by 14 |

| | |
|---|---|
| 2) | $0.04 or 4¢ |
| 4) | Subtraction |
| 6) | 3×5=15, 5×3=15, 15÷3=5, 15÷5=3 |
| 8) | $5.21 |
| 10) | $3.75 |
| 12) | $4.37 |
| 14) | 207 |
| 16) | 27 |
| 18) | $37.50 |
| 20) | 2639 |
| 22) | 56,000 |
| 24) | 120 |
| 26) | $13.50 |
| 28) | a. 15 b. 54 c. 6 d. 21 |
| 30) | Dividend ÷ Divisor = Quotient |

# Saxon Math Course 2 Summer Answer Key

## Practice Set 3

| | |
|---|---|
| a) | a = 19 |
| b) | b= 39 |
| c) | c = 12 |
| d) | d = 96 |
| e) | e = 30 |
| f) | f = 17 |
| g) | g = 31 |
| h) | h = 52 |
| i) | i = 6 |
| j) | j = 4 |
| k) | Answers will vary |

| | |
|---|---|
| 2) | Add the subtrahend and the difference to find the minuend. |
| 4) | 14 |
| 6) | a. Commutative Property<br>b. Associative Property |
| 8) | r = 69 |
| 10) | z = 173 |
| 12) | n = 16 |
| 14) | x = 42,000 |
| 16) | 12 |
| 18) | $32.10 |
| 20) | 1833 |
| 22) | 813 |
| 24) | 5104 |
| 26) | 158 |
| 28) | 60 R 4 |
| 30) | One is the multiplicative Identity because when any given number is multiplied by 1, the product is identical to the given number. |

**Early Finishers**

| |
|---|
| a. x = $1.00 |
| b. x = $3.25 |

## Practice Set 4

| | |
|---|---|
| a) | 4 + 2 = 6 |
| b) | 4 - 2 = 2 |
| c) | 2 + -4 = -2 |
| d) | -3, -2, -1, 0 |
| e) | $2 + 3 < 2 \times 3$ |
| f) | $3 - 4 < 4 - 3$ |
| g) | $2 \cdot 2 = 2 + 2$ |
| h) | Simplify each expression before comparing them. |
| i) | 0 |
| j) | -194 |
| k) | -2, -3, -4 |
| l) | 64, 81, 100 |
| m) | Each term in the sequence can be found by doubling the preceding term; 16, 32, 64 |
| n) | 1, 3, 5, 7 |

| | |
|---|---|
| 2) | 18 |
| 4) | a. 18 b. -18 c. 4 d. 144 |
| 6) | $5 \cdot 2 > 5+2$ |
| 8) | -1 |
| 10) | n = 12 |
| 12) | m = 899 |
| 14) | k = 7 |
| 16) | a. Commutative Property<br>b. Associative Property |
| 18) | $63.51 |
| 20) | 210 |
| 22) | 24,000 |
| 24) | -27 |
| 26) | $1.10 |
| 28) | $112.50 |
| 30) | Each term in the sequence can be found by multiplying the preceding term by ten: 1000 and 10,000 |

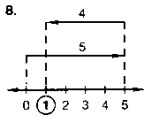
**Early Finishers**

| |
|---|
| a. $46.29 |
| b. yes, 2($16.88) + $12.25 = $46.01, $46.29 > $46.01 |

# Saxon Math Course 2 Summer Answer Key

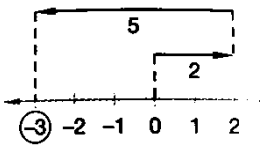
## Practice Set 5

| | |
|---|---|
| a) | 3 |
| b) | Billions |
| c) | (2 × 1000) + (5 × 100) |
| d) | Thirty-six million, four hundred twenty-seven thousand, five hundred eighty |
| e) | Forty million, three hundred two thousand, ten |
| f) | Commas separate periods in a number. In d and e place a comma after the thousands and millions. |
| g) | 25,206, 040 |
| h) | 50,402,100,000 |
| i) | $15,000,000,000 |
| j) | $15 million |

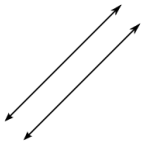
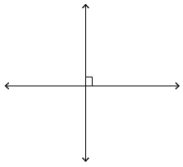
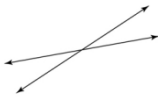
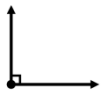
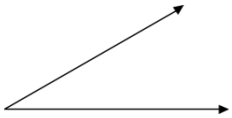
| | |
|---|---|
| 2) | 101,000 > 1100 |
| 4) | 2 |
| 6) | >; Negative twelve is greater than negative fifteen. |
| 8) | Draw a number line. Start at the origin and draw an arrow 5 units long to the right. From this point draw an arrow 4 units long to the left. The second arrow ends at 1 showing 5 - 4 = 1. Circle the number 1.   |
| 10) | n = 32 |
| 12) | b = 28 |
| 14) | d = 3600 |
| 16) | (7 × 100,000) + (5 × 10,000) |
| 18) | 6247 |
| 20) | $195.26 |
| 22) | 4 |
| 24) | 405 |
| 26) | $10.44 |
| 28) | Each term in the sequence can be found by subtracting two from the preceding term; 0, -2, -4 |
| 30) | {..., -6, -4, -2} |

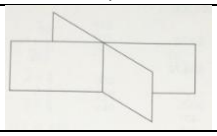
## Practice Set 6

| | |
|---|---|
| a) | 1, 5, 25 |
| b) | 1, 23 |
| c) | 1 and 24, 2 and 12, 3 and 8, 4 and 6 |
| d) | 1, 2, 3, 4, 5, 6, 7, 9, 10 |
| e) | 1, 2, 3, 4, 5, 6, 7, 10 |
| f) | 1, 2, 3, 4, 5, 6, 8, 9, 10 |
| g) | 1, 2, 3, 4, 6 |
| h) | 1, 2, 4, 5, 7, 8 |
| i) | 1, 2, 4 |
| j) | 8 |
| k) | Sample answer: List the factors of 24 and 40 and circle the common factors. |

| | |
|---|---|
| 2) | 1, 2, 5, 10 |
| 4) | 407,006,962 |
| 6) | > , Negative seven is greater than negative eleven. |
| 8) | -3   |
| 10) | $5.40 |
| 12) | z = $6.25 |
| 14) | k = 1339 |
| 16) | z = 256 |
| 18) | 40,000 |
| 20) | 96,300 |
| 22) | 1001 |
| 24) | $22.97 |
| 26) | 2240 |
| 28) | $4.35 |
| 30) | a. Associative Property<br>b. Commutative Property<br>c. Associative Property |

## Practice Set 7

| | |
|---|---|
| a) | Point A |
| b) | 4 cm |
| c) |  |
| d) |  |
| e) |  oblique |
| f) |  |
| g) |  |
| h) |  |
| i) | Perpendicular |
| j) | Sample answer: the floor and the ciling; walls that face each other. |
| k) | Sample answer: the floor and a wall; the ceiling and a wall |
| l) | line |
| m) | c. skewed |
| n) | Show work |

| | |
|---|---|
| 2) | Identity property of multiplication |
| 4) | 2 - 5 = -3 |
| 6) | 1, 2, 3, 4, 5, 6, 7 |
| 8) | This is a sequence of perfect squares. 121, 144, 169 |
| 10) | a. 1, 2, 4, 8 b. 8 |
| 12) | z = 34 |
| 14) | w = 530 |
| 16) | w = 4000 |
| 18) | The quotient does not have a remainder. (The remainder is zero.) A number is divisible by 9 if the sum of its digits is divisible by 9. The sum of the digits in 4554 is 18, which is divisible by 9. |
| 20) | 18,088 |
| 22) | $1.70 |
| 24) | $200 > 2$ |
| 26) | a. $\angle$BMC or $\angle$CMB<br>b. $\angle$AMC or $\angle$CMA |
| 28) | $\overline{XY}$ or $\overline{YX}$, $\overline{YZ}$ or $\overline{ZY}$, $\overline{XZ}$ or $\overline{ZX}$ |
| 30) |  |

**Early Finishers**

| |
|---|
| a) 64, 62, 66, 60, 68, 63, 61, 66 |
| b) 60, 61, 62, 63, 64, 66, 66, 68 |
| c) four; 62, 60, 63, 61 |

# Saxon Math Course 2 Summer Answer Key

## Practice Set 8

| | |
|---|---|
| a) | $\frac{3}{5}$ |
| b) | 60% |
| c) | 50% |
| d) |  |
| e) |  |
| f) |  |
| g) | $4\frac{2}{3}$ |
| h) | $13\frac{1}{4}$ |
| i) | $3\frac{5}{16}$ in. |
| j) | $\frac{1}{16}$ inch |
| k) | $\frac{1}{16}, \frac{1}{8}, \frac{1}{4}, \frac{1}{2}$ |

| | |
|---|---|
| 2) | XY = $2\frac{1}{4}$ in. YZ = $1\frac{1}{16}$ in. |
| 4) | 1, 2, 3, 4, 5, 6, 7, 8 |
| 6) | a. 3 + 2 = 2 + 3<br>b. Commutative Property of Addition |
| 8) | a. $\frac{3}{8}$ b. $\frac{5}{8}$ |
| 10) | Denominator |
| 12) | b = $34.52 |
| 14) | d = 4580 |
| 16) | f = 14 |
| 18) | 200,000 |
| 20) | 4743 |
| 22) | 1000 |
| 24) | 576 |
| 26) | a. k = 29 b. add 3 |
| 28) | Acute: $\angle$CBA or $\angle$ABC<br>Obtuse: $\angle$DAB or $\angle$BAD<br>Right: $\angle$CDA or $\angle$ADC and $\angle$DCB or $\angle$BCD |
| 30) | $\overline{QR}$ identifies the segment QR, while QR refers to the distance from Q to R. So $\overline{QR}$ is a segment and QR is a length. |

## Practice Set 9

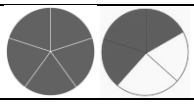
| | | | |
|---|---|---|---|
| a) | 1 | j) | $\frac{7}{8}$ |
| b) | $\frac{1}{5}$ | k) | $\frac{1}{5}$ |
| c) | $\frac{9}{40}$ | l) | $\frac{8}{5}$ |
| d) | $\frac{8}{3}$ | m) | $\frac{1}{6}$ |
| e) | $\frac{8}{21}$ | n) | $\frac{1}{20}$ of an inch because $\frac{1}{2}$ of $\frac{1}{10}$ is $\frac{1}{20}$ |
| f) | 0 | o) | $\frac{3}{2}$ |
| g) | $28\frac{4}{7}$% | p) | $\frac{1}{4}$ |
| h) | 75% | q) | Inverse Property of multiplication |
| i) | $\frac{5}{4}$ | | |

| | |
|---|---|
| 2) | $0.99 per pound or 99¢ per pound |
| 4) | (2 × 10,000) + (6 × 1000) |
| 6) | a. $\frac{2}{3}$ b. $\frac{1}{3}$ |
| 8) | LM = $1\frac{1}{4}$ in.<br>MN = $1\frac{1}{4}$ in.<br>LN = $2\frac{1}{2}$ in. |
| 10) | a. $\frac{4}{5}$ b. 0 |
| 12) | c = 15 |
| 14) | e = $2.50 |
| 16) | n = 0 |
| 18) | $2\frac{7}{8}$ |
| 20) | 106 |
| 22) | 47,346 |
| 24) | $\frac{7}{9}$ |
| 26) | Inverse Property of Multiplication |
| 28) | a. $\angle$A and $\angle$B b. $\overline{AC}$ or $\overline{CA}$ |
| 30) | $\frac{5}{2}$ |

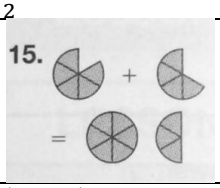
# Saxon Math Course 2 Summer Answer Key

## Practice Set 10

| | | | |
|---|---|---|---|
| a) | $8\frac{3}{4}$ in. | i) | $3\frac{1}{3}$ |
| b) | $14\frac{2}{7}$ % | j) | $\frac{5}{3}$ |
| c) | $2\frac{2}{5}$ | k) | $\frac{23}{6}$ |
| d) | 2 | l) | $\frac{19}{4}$ |
| e) | $3\frac{5}{7}$ | m) | $\frac{11}{2}$ |
| f) |  | n) | $\frac{27}{4}$ |
| g) | 2 | o) | $\frac{52}{5}$ |
| h) | $1\frac{5}{9}$ | p) | Sample: $\frac{8}{2}, \frac{16}{4}, \frac{20}{5}$ |

| | |
|---|---|
| 2) | a. Parallel b. Perpendicular |
| 4) | a. 30% b. 70% |
| 6) | a. < b. > |
| 8) |  |
| 10) | x = 23,775 |
| 12) | z = 37,600 |
| 14) | b = $25.00 |
| 16) | $\frac{1}{16}, \frac{3}{8}, \frac{1}{2}, \frac{3}{4}$ |
| 18) | 0 |
| 20) | 1379 |
| 22) | $17.20 |
| 24) | $5\frac{1}{3}$ |
| 26) | a. Ray; $\overrightarrow{MC}$ b. Line; $\overleftrightarrow{PM}$ or $\overleftrightarrow{MP}$<br>c. Segment; $\overline{FH}$ or $\overline{HF}$ |
| 28) | 1; $\frac{1}{2}, \frac{1}{4}$ |
| 30) | a. -5 b. $\frac{1}{3}$ c. They are reciprocals. |

## Investigation 1

| | |
|---|---|
| 1) | $\frac{1}{4}$ |
| 2) | $\frac{1}{6}$ |
| 3) | $\frac{1}{12}$ |
| 4) | $\frac{1}{8}$ |
| 5) | $\frac{1}{6}$ |
| 6) | $\frac{1}{12}$ |
| 7) | 6 |
| 8) | $\frac{1}{4}$ |
| 9) | $\frac{1}{2}$ |
| 10) | $\frac{1}{3}$ |
| 11) | 4 mi |
| 12) | 9 eggs |
| 13) | $5 \times \frac{1}{3} = 1\frac{2}{3}$ |
| 14) | $\frac{1}{2}$ |
| 15) |  |
| 16) | $\frac{1}{6}$ and $\frac{1}{3}$ |
| 17) | $\frac{1}{6}$ |
| 18) | $\frac{1}{12}$ |
| 19) | $\frac{1}{4}$ |
| 20) | $\frac{1}{12}$ |
| 21) | $66\frac{2}{3}$% |
| 22) | 25% |
| 23) | $37\frac{1}{2}$% |
| 24) | a. 50% b. All equivalent to $\frac{1}{2}$ |
| 25) | $33\frac{1}{3}$ % |
| 26) | $\frac{3}{4}$ |
| 27) | $\frac{1}{3}$ |
| 28) | $\frac{1}{4}$ |
| 29) | $\frac{1}{4}$ |

| | |
|---|---|
| 30-32) | Show work |
| 33) | 0.25 + 0.25 = 0.5 |
| 34) | 0.5 + 0.5 = 1 |

**Extension**

a) Sample: Mental Math because I could change both values to a fraction with a denominator of 10.

b) >, >, <

c) Show work in your sketch.
Sample: Figures A, B, and C are divided into an even number of parts and the segments that divide them form diameters. Figures D, E, and F are divided into an odd number of parts and the segments that divide them do not form diameters.