



# RISING GRADE 6 ANSWER KEY

<p style="text-align: center;"><b>Review #1</b></p> <p>1. 14                  2. a. &gt; b. &lt;                  3. See student work                  4. 1.395                  5. </p> <p>6. 28 square feet                  7. a. 3:55 b. 7:40                  8. Perimeter, 68 in.                  9. <math>\frac{6}{6} = 1</math>                  10. answers will vary</p>	<p style="text-align: center;"><b>Review #6</b></p> <p>1. 68.116                  2. \$61                  3. a. 3/20 b. 7/20                  4. a. right b. acute                     c. obtuse                  5.  0.33 = 33%                  6. 4                  7. 102.9                  8. 400 sq. ft.                  9. 2                  10. 5 min. 57 sec.</p>
<p style="text-align: center;"><b>Review #2</b></p> <p>1. a. thousandths                  b. hundredths c. ten thousands                  2. 11 years old                  3. 7.107                  4. 612 dozen                  5. 8% because the total needs to be 100%</p> <p>6. 90, right                  7. 66 yards                  8. mean - 11, mode - 12                  9. A = -5 B = -1 C = 1 D = 4                  10. no, not same size and shape</p>	<p style="text-align: center;"><b>Review #7</b></p> <p>1. See student work, obtuse                  2. 28 yds.                  3. 3r3 or 3 3/94 or 3.03                  4. 3x = 45, x = 15                  5. 14 1/12</p> <p>6. acute, less than 90°                  7. 100.007                  8. 3:30 p.m.                  9. 14, 19, 25 (increase by 1 more each time)                  10. 226.75</p>
<p style="text-align: center;"><b>Review #3</b></p> <p>1. <math>6\frac{1}{2}</math>                  2. 10 - 1,2,5,10 composite                  7 - 1,7 prime                  20 - 1,2,4, 5, 10, 20 composite                  3. 3                  4. <math>10\frac{23}{24}</math>                  5. 84 inches</p> <p>6. 107,219,443 (doubles and increases by 5)                  7. 6 hours and 20 minutes                  8. 78 r5 or 78 5/42 or 78.12                  9. 14 cm                  10. check student work</p>	<p style="text-align: center;"><b>Review #8</b></p> <p>1. <math>48 \div 8 = 6</math>                  2. 0.059                  3. graphs will vary                  (a bar graph is appropriate)                  4. <math>4\frac{1}{4}</math>                  5. area, check reasoning</p> <p>6. a. 0.3 or 0.30 b. 0.64                  7. -4°F                  8. a. congruent (same size and shape)                  b. similar (same shape)                  9. c                  10. obtuse</p>
<p style="text-align: center;"><b>Review #4</b></p> <p>1. a. 9 b. tenths                  2. 13 - 1,13 prime                  54 - 1,2,3,6,9,18,27,54 composite (Note: A is also a chord)                  72 - 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72 composite                  3. 8 cm                  4. 1.231                  5. 12%, 88%</p> <p>6. 129                  7. A - diameter, B - chord, C-radius                  8. 0.056                  9. No. Arriving before 5 would mean less than 2 hours of driving which is fewer than 110 miles                  10. Obtuse, larger than 90°</p>	
<p style="text-align: center;"><b>Review #5</b></p> <p>1. &gt;                  2. a. cm, ft or in                  b. kg or lbs.                  3. 0.215                  4. <math>2\frac{1}{4}</math> pounds                  5. 12 yards</p> <p>6. 7 r27 or 7 27/28 or 7.96                  7. See student work                  8. 86°                  9. 36, 49, 64                  10. check student work</p>	

# RISING GRADE 7 ANSWER KEY

## Week 1

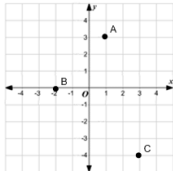
1.  $2/5$ ;  $0.4$
2. Shaded [closed] circle at 3, shading to the left of 3; inequality
3.  $22/25$
4.  $3^4$ ;  $5^2 \times 7^3$ ;  $4n^3m^2$
5. a) soccer b) 100
6. a) 60 b) 20 c) 3
7.  $5' 6 \frac{1}{4}"$
8. 25%
9. (going across) 2, 4, 8, 16
10. Sample:  $4 + 0 = 4$

## Week 2

1. \$2.25
2.  $3^2$
3. About 6.6 lbs.
4.  $x \leq 2$
5. No, since the parentheses changes the order of operations. The results are 20 and 8.
6.  $4/5$ ; 0.8; between 0.5 and 1, a little off-center and closer to 1; any drawing with 4 parts out of 5 shaded.
7.  $\frac{1}{4}$
8. False. Congruent means they would have the same side lengths and angle measures. Not all triangles have the same lengths and measures.
9.  $3/8$
10. a) always b) sometimes

## Week 3

1. Same: both are changing by a constant value of 5; Different: a is increasing while b is decreasing.



- 2.
3.  $78.5 \text{ cm}^2$
4. 0
5. -5; numberline should show the numbers appropriately spaced and in this order from left-to-right: -5, -1, 0, 5
6. 1040 ft
7.  $25 \frac{2}{3} \text{ yds}^2$
8. Unshaded (open) circle at -2; shading to the right of -2.
9.  $<$ ;  $4/5$  is larger
10.  $540 \text{ in}^3$

## Week 4

1.  $8 \frac{5}{12}$  cups
2. No whole number multiplied by itself is 50; closest are:  $7 \times 7 = 49$  and  $8 \times 8 = 64$ . The square root of 50 would be a number between 7 & 8.
3.  $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$
4. R(-1, 2); S(3, 4); T(0, -4)
5.  $\frac{1}{2}$ , 0.5,  $5/10$ , and .50
6. ABCD would be four times the size of the given square.
7. 110; mode not so helpful here, since there is not a number that repeats enough to say it represents the typical value.
8. 7 packages (there would be 15 leftover plates)
9. Alma, Paul, Chris, Dana, Tyler
10. 3

## Week 5

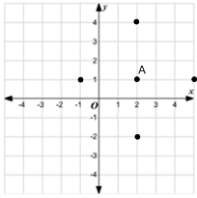
1. The probability of an event must be between 0 and 1, because 0 represents no chance of the event happening, and 1 represents the event definitely happening. Probability may be in between these two absolutes, but not beyond.
2.  $3/5$ ; 3:5
3.  $x > -4$

## Week 6

1. Identity
2. -2 degrees Fahrenheit is warmer
3.  $2/3$
4.  $300 \text{ yds}^2$ ; 80 yds
5.  $5 \frac{1}{2}$ ; equation
6. B & E are congruent; A, F, & D are congruent.
7. 60%
8.  $32 - 6 = N$ ; 26

Summer Review for students who have COMPLETED Math 6

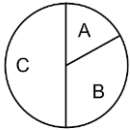
4.  $4\frac{1}{3}$
5.  $2\frac{4}{5}$
6. The sequence increases by 4...  $12+4=16$ , which skips 14.



- 7.
8. 18.84 inches
9. Sample: a square with length and width of 4
10. About 3.1 hours

9. The point would go on the mark that is two units before 1.
10. 72

**Week 7**



- 1.
2. =
3. A measure of center is a way of communicating the "typical" value of the data set, usually in terms of the average, middle, or most frequent value in the set (mean, median, and mode).
4.  $A = lw$ ;  $7300 \text{ m}^2$
5. No, they do not appear to be the same length.
6. No, they would need another \$10.
7.  $x \geq 2$
8.  $M(1,3)$ ,  $A(4,0)$ ,  $T(3,6)$ ,  $H(6,2)$
9. 32, 64, 128



10. Sample:

**Week 8**

1. 0.50, 90%, 100%,  $\frac{3}{2}$
2. 5 degrees Fahrenheit
3. 281.75 ft
4.  $\frac{4}{7}$
5.  $11\frac{7}{8}$
6. \$600
7.  $\frac{1}{4}$
8.  $\frac{1}{4}$
9.  $1056 \text{ in}^3$
10. 12

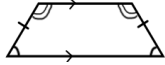
# RISING GRADE 8 ANSWER KEY

## Week 1

1. 4
2.  $8.26 \times 10^6$
3. 15
4.  $x \leq -4$ ; solid [closed] circle at -4, with shading to the left
5. 15%
6.  $\frac{3}{4}$
7. -207
8. Commutative Property of addition
9. Image has vertices:  $A'(-5,1)$ ,  $B'(-2,1)$ ,  $C'(-5,4)$
10.  $9/12=15/20$

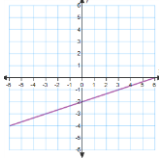
## Week 2

1. 20
2. 6 ft
3. B and F
4. 6 ; 21; Each time the number of new bricks increases by 1.
5. Sample:
 


6. -7
7. 18'
8. Kite; quadrilateral, polygon
9. 5%
10.  $3/20$

## Week 3

1.
 


2. 5
3.  $2.743 \times 10^7$
4. \$160
5. 250
6. 18 meters below the surface
7. -6
8. 320,000
9. 7.5 feet
10. a, c, h, i, l

## Week 4

1.  $13/52 \times 12/51$
2. 1/10000
3. \$275; 17 months
4. Sample:  $19+m=31$ ;  $m = 12$
5. No. Only 288 different combinations are possible, and there are 365 days in a year.
6. \$36
7. A rectangle has four right angles; a rhombus has four congruent sides.
8. 10
9. A and D
10. Identity property of multiplication

## Week 5

1. 100; show your strategy.
2. \$1080
3. -6
4.  $z \leq -3$
- 5.

Day	1	2	3	4	5	6	7
Minutes	1	2	4	8	16	32	64

- She jogs 64 minutes on 7<sup>th</sup> day.
6. -123 degrees Celsius
  7. The middle bar (70-79) would be shaded to a frequency of 9 (halfway between 8 and 10).
  8.  $C'(1, -2)$

# Rising Grade 8 Answer Key (cont)

## Week 6

1. \$160
2. The theoretical probability of flipping heads in one toss is  $\frac{1}{2}$ . So in theory, we would expect that for 10 tosses, heads should appear 5 times. However, each flip is independent and during the experiment heads may not appear exactly 5 times. But it is likely that the number of times heads appears is close to 5.
3. 5
4.  $1.42 \times 10^8$
5. 1<sup>st</sup> missing output: 18; missing input: 8; missing function rule:  $3(10)$ ; 2<sup>nd</sup> missing output: 30
6.  $846 \text{ cm}^2$
7. 32 feet
8. 729
9.  $3.3 \times 10^{-1}$  is greater, by 0.03
10.  $-2 \frac{2}{5}$

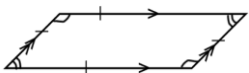
## Week 7

1. 360
2. -2
3. B, C, E
4.  $45 \text{ cm}^2$
5.  $52.99 \text{ cm}^3$
6. 6
7. A
8. 6 combinations: Tree shows sugar branching to chocolate, vanilla and strawberry, followed by cake branching to chocolate, vanilla, and strawberry.

## Week 8

1. 1
2. 4
3. 75 laps
4.  $n^2$
5. 350 miles
6.  $2,110.08 \text{ in}^2$
7.  $-4 = x - 6$ ; 2
8. First row: Quadrilateral  
Second row in this order: Kite, Parallelogram, Trapezoid.  
Third row in this order: Rhombus, Rectangle  
Fourth row: Square
9.  $216 \text{ ft}^3$

## Week 9

1. 
2. \$16.64
3. The theoretical probability of spinning red once is  $\frac{1}{4}$ . Therefore, out of 8 spins, red would be expected to appear 2 times, since  $2/8 = \frac{1}{4}$ . Mike spun red 3 times, which is more than the expected 2 times in theory.
4. B
5. -11, -8, -5, -2, 1
6. T - 10
7. On the 8<sup>th</sup> person's turn
8. \$4.16
9.  $(36 - 12)/6$ ; 4 brownies each
10. The volume would also be half.

## Week 10

1. In 13 rows of 13 chairs
2.  $512 \text{ in}^3$
3. -10
4.  $-1 \frac{2}{5}$
5. 4.5 feet
6. \$6.40
7. \$600
8. Distributive
9.  $\frac{1}{3}$ ,  $0.\bar{3}$ ,  $33 \frac{1}{3} \%$ , point on numberline should be placed between 0 and 0.5, slightly closer to 0.5.
10. The graph should have the new vertices:  $(-2, 4)$ ,  $(2, 4)$ ,  $(-2, -4)$ ,  $(2, -4)$