

# Pre-Algebra – Summer Math Packet

## Answer Key

**Check your answers after completing each section. Circle whichever statement applies to you.**

Page 2

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $5x > 25$			
2. $x + 6 \geq 15$			
3. $24 \div x < 7$			
4. $2x - 5 \leq 124$			
5. $x \geq 16$			
6. $19 + 14x \leq 65$			


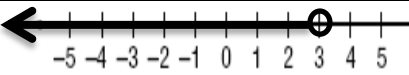
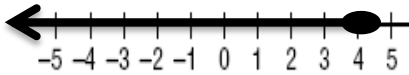
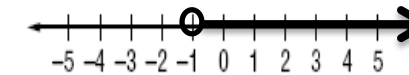
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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $x = -3$			
2. $r = -8$			
3. $t = -4$			
4. $t = 2.25$			
5. 6 buckets			
6. 9 lbs			

Page 4

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $y \leq 9$			
2. $y \geq 6$			
3. $y < 7$			
4. $x > -1$			
5. At most 1.5 hours			
6. At most 4 shirts			

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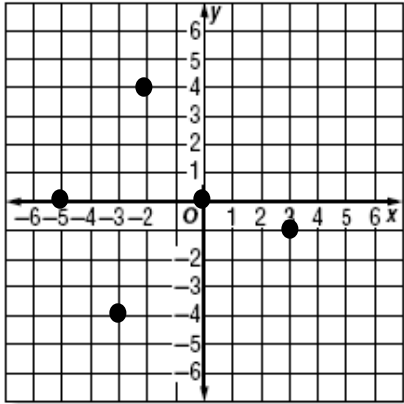
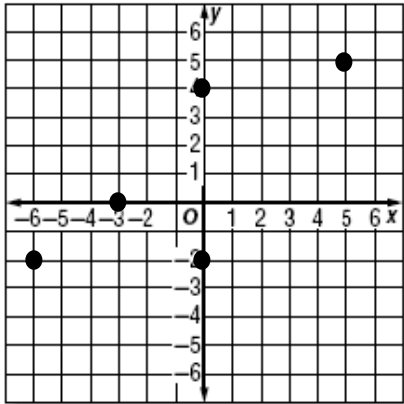
Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $x \geq -3$			
2. $x > 0$			
3. 			
4. 			
5. 			
6. 			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 36 cm <sup>2</sup>			
2. 42 ft <sup>2</sup>			
3. 175.5 cm <sup>2</sup>			
4. 420 in <sup>3</sup>			
5. 56 ft			
6. About 188.4 m			

Page 7

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. P (2,-3) IV; Q (-3, -2) III; R (1, 3) I; S (-2, 2) II			
2. A (-1, 1) II; J (3, -5) IV; B (5, 5) I; H (2, -2) III			
3. 			
4. 			

Page 8

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. Supplementary			
2. Complementary			
3. Neither			
4. Neither			
5. 3 & 1			
6. 7 & 8			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 94°			
2. 131°			
3. 33°			
4. 117°			
5. Complementary, 42°			
6. 128°			

Page 10

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 92°			
2. 111°			
3. 85°			
4. 77°			
5. 80°			
6. 116°			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1a. <del>ML</del>			
1b. <u>HJ</u>			
1c. <u>KN</u>			
2a. ∠M			
2b. ∠J			
2c. ∠L			
2d. ∠N			
3a. 4 cm			
3b. 5 cm			
3c. 45°			
4. 40 units			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 66 ft <sup>2</sup>			
2. 4.6 cm <sup>2</sup>			
3. 28 in <sup>2</sup>			
4. 236 in <sup>2</sup>			
5. 350 ft <sup>2</sup>			
6. 85,000 ft <sup>2</sup>			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 31.5 in <sup>2</sup>			
2. 175.5 cm <sup>2</sup>			
3. 39.2 cm <sup>2</sup>			
4. 150 mm <sup>2</sup>			
5. About 44, 323 mi <sup>2</sup>			
6. 172.5 ft <sup>2</sup>			

Page 14

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 127 mi			
2. 3.5 in			
3. 16 in			
4. 150 cm			
5. $77\frac{1}{7}$ cm			
6. 63.375 ft			

Page 15

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. Scale doesn't include 0.			
2. Interval is too big.			
3. See example.			
4. Make the range on the y-axis between 0 & 50.			
5. Doesn't include 0 & range is too high			
6. Start at 0 and make the range between 0 & 100.			

Page 16

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. Pie Chart			
2. Line Graph			
3. Bar Graph			
4. Back to Back Stem and Leaf Plot			
5. Line Graph			
6. Bar Graph			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. Mean: 2,599; Median: 3,190; Mode: None			
2. The mean is misleading because this is less than a majority of the data.			
3. The median. It is in the middle of the data.			
4. Mean: 17.5; Median: 16.5; Mode: 2			
5. The mode is misleading because it is above a majority of the data. The mean and median are both good representations as they are both in the center of the data.			
6. Melissa			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 6			
2. <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">             Red <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> <div style="text-align: center;">             Silver <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> <div style="text-align: center;">             Purple <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> </div>			
3. <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">             Yellow <math>\left\{ \begin{array}{l} \text{Jeans} \\ \text{Khakis} \\ \text{White} \end{array} \right.</math> </div> <div style="text-align: center;">             Purple <math>\left\{ \begin{array}{l} \text{Jeans} \\ \text{Khakis} \\ \text{White} \end{array} \right.</math> </div> <div style="text-align: center;">             Blue <math>\left\{ \begin{array}{l} \text{Jeans} \\ \text{Khakis} \\ \text{White} \end{array} \right.</math> </div> <div style="text-align: center;">             Green <math>\left\{ \begin{array}{l} \text{Jeans} \\ \text{Khakis} \\ \text{White} \end{array} \right.</math> </div> </div>			
4. 24			
5. <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">             Regular <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> <div style="text-align: center;">             Midgrade <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> <div style="text-align: center;">             Premium <math>\left\{ \begin{array}{l} 180 \\ 125 \end{array} \right.</math> </div> </div>			
6. 6			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{1}{6}$			
2. $\frac{5}{12}$			
3. $\frac{1}{10}$			
4. $\frac{3}{16}$			
5. $\frac{1}{8}$			
6. $\frac{1}{24}$			

Page 20

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{11}{20}$			
2. 220			
3. $\frac{1}{5}$			
4. 60			
5. 150			
6. 30			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{1}{10}$ , 0.1, 10%			
2. $\frac{3}{10}$ , 0.3, 30%			
3. $\frac{41}{50}$ , 0.82, 82%			
4. $\frac{1}{2}$ , 0.5, 50% $\frac{1}{2}$ , 0.5, 50%			
5. $\frac{3}{10}$ , 0.3, 30%			
6. $\frac{8}{25}$ , 0.32, 32%			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 0.735			
2. 0.6			
3. 4.625			
4. $\frac{47}{50}$			
5. $\frac{12}{25}$			
6. $\frac{1}{3}$ , $0.\overline{3}$			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 0.28, 28%			
2. 0.19, $\frac{19}{100}$			
3. 0.18, 18%			
4. 0.75, $\frac{3}{4}$			
5. $\frac{1}{2}$ , 0.5, 50%			
6. $\frac{1}{4}$ , 0.25			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{1}{5}$ , 22%, 0.3			
2. 70%, 0.74, $\frac{3}{4}$			
3. >			
4. >			
5. Large			
6. 0.6, $\frac{7}{10}$ , 72%			

Page 25

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. -5			
2. -21			
3. 5			
4. -4			
5. 85°			
6. 8 ft			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 98			
2. -14			
3. 45			
4. 12			
5. -12			
6. 11 min.			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{4}{9}$			
2. $17\frac{2}{3}$			
3. $5\frac{13}{18}$			
4. $5\frac{1}{6}$			
5. $4\frac{1}{12}$ cups			
6. $4\frac{3}{8}$ yds			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{4}{5}$			
2. $\frac{1}{2}$			
3. $5\frac{1}{10}$			
4. $\frac{11}{24}$			
5. $2\frac{5}{12}$ lbs			
6. $2\frac{7}{12}$ lbs			

Page 29

Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. $\frac{8}{15}$			
2. $10\frac{1}{2}$			
3. $5\frac{5}{6}$			
4. $15\frac{2}{3}$			
5. $20\frac{1}{2}$ yds			
6. $\frac{5}{12}$			

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Answer	I got it on the 1 <sup>st</sup> try!	I got it with corrections.	I have no idea.
1. 60% decrease			
2. \$23.40			
3. 20% increase			
4. \$126.65			
5. 44.4%			
6. 29%			



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<b>Answer</b>	<b>I got it on the 1<sup>st</sup> try!</b>	<b>I got it with corrections.</b>	<b>I have no idea.</b>
1. \$90.10			
2. \$10.57			
3. \$163.80			
4. \$21,316.10			
5. \$12,960.00			
6. \$4,013.45			