Summer Math Packet

At-home Summer Practice



6th Grade

Write the ordered pair for each point.



IXL.com skill ID **NTR**

For more practice, visit IXL.com or the IXL mobile app and enter this code in the search bar.

Plot the points from each table on the coordinate plane.

у
1
7
6
0



x	у
0	4
3	2
5	5
10	1



The coordinate plane below shows a map. Use the map to answer the questions.



What is the location of Olson's Grocery Store? Write the ordered pair.

What is located at (8, 3)?

What is the distance, in units, between the foodball stadium and Dale's Diner?



If you go left 1 and up 3 from Threads-R-Us Clothing Store, you will find the city library. Plot and label this point on the coordinate plane. 4 Translations

You can move a point up, down, right, or left on a graph. This movement is called a *translation*. Try it yourself! Move each point. Then write the new ordered pair.



Move point *W* right 2 units.







5 Word problems

Answer each question.

Ms. Jensen is throwing a birthday party for her daughter. She buys a roll of wrapping paper that is 15 feet long. How many **yards** of wrapping paper does she have?

She buys 3 quarts of fruit punch to serve at the party. How many **cups** of fruit punch is that?

She wants to make a photo booth for the party guests. She finds a backdrop that is 96 inches tall. What is the height of the backdrop, in **feet**?

For the balloon decorations on the tables, Ms. Jensen buys a box of balloon weights. The box of weights is 192 ounces. How many **pounds** is that?

Ms. Jensen also wants to make lemonade for the party guests. She finds a recipe that makes 32 fluid ounces of lemonade. If she triples that recipe, how many **pints** of lemonade will she have?

IXL.com skill ID MJ9

Compare the measurements using >, <, or =.



7 Word problems

Answer each question.

Evelyn went to Toys and Games Galore with her family. She found a unicorn water bottle that holds 0.35 liters of water. How many **milliliters** of water can this bottle hold?

Her brother wanted the Rip-Roaring Roller Coaster Model. The package says that the model will be 90 centimeters tall when fully built! How tall will it be in **millimeters**?

Evelyn's sister found the Create-A-Beach Sand Kit. The kit comes with 1.2 kilograms of sand. How many **grams** of sand are in the kit?

Her dad wanted to buy more bubbles for their bubble machine. Pop's Bubbles has 1.39 liters in a bottle. Super Sparkle Bubbles has 1,330 milliliters in a bottle. Which bottle has more?



Find the volume of each prism.



Write the shape names to complete the graphic organizer.



10 Drawing quadrilaterals

skill ID

Draw each shape. Try not to draw the same shape twice!

A trapezoid
A parallelogram that is not a rectangle
A quadrilateral that is not a parallelogram

11 Answer key

PAGE 1

A (1, 5) B (3, 8) C (7, 6) D (9, 3) E (2, 10) F (3, 3)

PAGE 2



PAGE 3

(10, 9) Threads-R-Us Clothing Store 4 units



PAGE 4



PAGE 4, continued





(7, 9)



PAGE 5

0

5 yards 12 cups 8 feet 12 pounds 6 pints

PAGE 6

7,200 mg < 720 g 7.3 cm = 73 mm 6,460 mL > 6.4 L 30 g > 3,000 mg 14,600 mg > 1.46 g 2.2 L = 2,200 mL 3,320 cm > 3.32 m 31.36 cm > 313 mm 805 mg < 80.5 g 52.2 km > 5,522 m

PAGE 7

350 milliliters 900 millimeters 1,200 grams Pop's Bubbles

PAGE 8

 $\begin{array}{rrr} 343 \mbox{ mm}^3 & 360 \mbox{ in.}^3 \\ 90 \mbox{ m}^3 & 210.9 \mbox{ cm}^3 \\ \frac{6}{8} \mbox{ or } \frac{3}{4} \mbox{ ft.}^3 \end{array}$

PAGE 9



PAGE 10

Answers will vary. Some possible answers are shown below.



Multiply. Write your answer as a proper fraction or mixed number in simplest form.



For more practice, visit IXL.com or the IXL mobile app and enter this code in the search bar.

skill ID

69L

Multiply. Write your answer in simplest form. Then circle all of the answers that are greater than $\frac{1}{2}$.



3 Word problems

Answer each question. Write your answer in simplest form.

A group of 8 friends were having a picnic, and $\frac{3}{4}$ of them brought sandwiches. How many of the friends brought a sandwich?

A bike trail is 12 miles, and $\frac{5}{6}$ of it goes along the river. How many miles of the trail are along the river?

Rebecca has 9 video games on her shelf, and $\frac{1}{3}$ of them are racing games. How many racing games does Rebecca have?

A group of 10 friends went to a ski resort, but $\frac{2}{5}$ of them did not know how to ski. How many friends did not know how to ski?



4 Word problems

Answer each question. Write your answer in simplest form.

Mel has a box of donuts, and $\frac{2}{3}$ of the donuts are mini. Out of all the mini donuts, $\frac{3}{4}$ are chocolate. What fraction of the whole box are mini chocolate donuts?

At the Fairview Symphony, $\frac{1}{4}$ of the musicians play string instruments. Of the musicians who play string instruments, $\frac{1}{4}$ play the violin. What fraction of the musicians play the violin?

At her orchard, April estimates that $\frac{5}{8}$ of the apples are red. She also estimates that $\frac{4}{9}$ of the red apples are Gala apples. According to her estimates, what fraction of the apples in her orchard are Gala apples?

At the Atlantic Aquarium, $\frac{5}{6}$ of the animals are fish. On a tour, Jessie learns that $\frac{3}{4}$ of all of the fish at the aquarium are saltwater fish. What fraction of the animals in the aquarium are saltwater fish?

IXL.com skill ID **38Y** Without doing the math, decide whether the product will be greater than or less than the first factor.

$$8 \times \frac{1}{2} \text{ will be } \underline{\text{LESS}} \text{ than 8.} \qquad \frac{1}{3} \times 3\frac{3}{4} \text{ will be } \underline{\text{LESS}} \text{ than } \frac{1}{3} \text{ solution}$$
$$\frac{1}{3} \times 3\frac{3}{4} \text{ will be } \underline{\text{LESS}} \text{ than } \frac{1}{3} \text{ solution}$$
$$\frac{7}{8} \times \frac{8}{9} \text{ will be } \underline{\text{LESS}} \text{ than } \frac{7}{8} \text{ solution}$$

Without doing the math, compare each pair of products using > or <.

$$12 \times \frac{1}{9} \bigcirc 12 \times 1\frac{1}{9} \qquad \frac{8}{15} \times 2\frac{1}{5} \bigcirc \frac{8}{15} \times \frac{1}{5}$$

$$156 \times 4\frac{1}{7} \bigcirc 156 \times \frac{4}{7} \qquad 8 \times \frac{6}{7} \bigcirc 8 \times 1\frac{1}{8}$$

You can use what you know about scaling to compare other products, too. Keep going! Compare each pair of products using > or <.

$$22 \times \frac{1}{6} \bigcirc 32 \times \frac{1}{6} \qquad 94 \times 1\frac{1}{4} \bigcirc 90 \times \frac{2}{3}$$
IXL.com
skill ID
Q7M

Multiply. Write your answer as a proper fraction or mixed number in simplest form.



Word problems Answer each question. Write your answer as a proper fraction or mixed number in simplest form. On Wednesday, Mark ran 3 $\frac{3}{5}$ miles at cross country practice. At Thursday's practice, he ran $2\frac{1}{2}$ times as far as he did on Wednesday. How many miles did he run on Thursday? Justin bought 4 packages of cheese at Carly's Cheese Shop. Each package of cheese weighed 1 $\frac{1}{4}$ pounds. How many pounds of cheese did he buy? Gavin has 3 $\frac{1}{2}$ cups of vegetable oil in his cupboard. He needs $\frac{1}{2}$ of the oil for a salad dressing. How many cups of oil does he need for the salad dressing? Mackenzie's apartment is $5\frac{1}{2}$ blocks from her work. If she walks to work and then back home, how many blocks has she walked?

IXL.com skill ID **5W6** Divide. Draw models to help.









 $\frac{1}{5} \div 2 =$



Answer each question. Draw models to help.

Erica made a block of scented soap. The block weighs $\frac{1}{2}$ of a pound. If she cuts the soap into 2 equal bars, how much will each bar weigh?

Bailey bought 2 bags of pita chips. If she eats $\frac{1}{7}$ of a bag each day, how long will the chips last?

Mr. Murray bought $\frac{1}{4}$ of a pound of turkey at the deli. He wants to use the turkey to make 3 sandwiches. If he splits the turkey equally, how much turkey will be on each sandwich?

Zander wants to make a few bandanas for his puppy. He has 3 yards of paw-print fabric. Each bandana uses $\frac{1}{2}$ of a yard of fabric. How many bandanas can he make?



Divide. Write your answer as a proper fraction or mixed number in simplest form.



Answer key

$8 \times \frac{1}{6} = 1\frac{1}{3}$
$\frac{11}{12} \times 5 = 4\frac{7}{12}$
$\frac{3}{4} \times 2 = 1\frac{1}{2}$
$3 \times \frac{5}{6} = 2\frac{1}{2}$
$\frac{4}{5} \times 10 = 8$
$8 \times \frac{10}{11} = 7\frac{3}{11}$
$\frac{5}{7} \times \frac{1}{3} = \frac{5}{21}$
$\frac{1}{4} \times \frac{1}{5} = \frac{1}{20}$
$\frac{4}{5} \times \frac{2}{3} = \underbrace{\binom{8}{15}}$
$\frac{7}{9} \times \frac{1}{2} = \frac{7}{18}$
$\frac{5}{9} \times \frac{3}{5} = \frac{1}{3}$
$\frac{5}{11} \times \frac{11}{12} = \frac{5}{12}$

PAGE 5			
$8 \times \frac{1}{2}$ will be less that	n 8.		
$\frac{1}{3} \times 3 \frac{3}{4}$ will be grea	ter than $\frac{1}{3}$.		
$2 \times 1 \frac{5}{12}$ will be greater than 2.			
$\frac{7}{8} \times \frac{8}{9}$ will be less than $\frac{7}{8}$.			
$12 \times \frac{1}{9} < 12 \times 1 \frac{1}{9}$	$\frac{8}{15} \times 2 \frac{1}{5} > \frac{8}{15} \times \frac{1}{5}$		
$156 \times 4 \frac{1}{7} > 156 \times \frac{4}{7}$	$8 \times \frac{6}{7} < 8 \times 1 \frac{1}{8}$		
$22 \times \frac{1}{6} < 32 \times \frac{1}{6}$	$94 \times 1 \frac{1}{4} > 90 \times \frac{2}{3}$		
	$16 \times 1 \frac{1}{8} > 15 \times \frac{7}{8}$		
PAGE 6			
$2\frac{1}{2} \times 3 = 7\frac{1}{2}$	$2\frac{1}{9} \times \frac{1}{4} = \frac{19}{36}$		
$\frac{3}{5} \times 1\frac{2}{3} = 1$	$\frac{9}{10} \times 2\frac{1}{4} = 2\frac{1}{40}$		
$3\frac{1}{5} \times 4 = 12\frac{4}{5}$	$4\frac{1}{2} \times 1\frac{3}{10} = 5\frac{17}{20}$		
$1\frac{1}{5} \times 1\frac{3}{4} = 2\frac{1}{10}$	$2\frac{2}{5} \times 1\frac{2}{7} = 3\frac{3}{35}$		
$4\frac{1}{2} \times 2\frac{1}{3} = 10\frac{1}{2}$	$1\frac{1}{9} \times 1\frac{7}{8} = 2\frac{1}{12}$		
	$1\frac{2}{7} \times 4\frac{1}{5} = 5\frac{2}{5}$		

PAGE 9
$\frac{1}{4}$ of a pound
14 days
$\frac{1}{12}$ of a pound

6 bandanas

PAGE 10

$\frac{5}{7} \div 3 = \frac{5}{21}$	$\frac{1}{2} \div 2 = \frac{1}{4}$
$2 \div \frac{1}{5} = 10$	$\frac{1}{6} \div 5 = \frac{1}{30}$
$7 \div \frac{2}{3} = 10 \frac{1}{2}$	$\frac{2}{5} \div 4 = \frac{1}{10}$
$\frac{4}{5} \div 3 = \frac{4}{15}$	$\frac{1}{4} \div 8 = \frac{1}{32}$
$9 \div \frac{7}{10} = 12 \frac{6}{7}$	$11 \div \frac{3}{5} = 18 \frac{1}{3}$

PAGE 3

6 friends 10 miles 3 racing games 4 friends PAGE 4	PAGE 7 9 miles 5 pounds $1\frac{3}{4}$ cups 11 blocks	
$\frac{1}{2}$ $\frac{1}{16}$ $\frac{5}{18}$ $\frac{5}{8}$	PAGE 8 $4 \div \frac{1}{5} = 20$ $2 \div \frac{1}{6} = 12$ $3 \div \frac{1}{5} = 15$ $5 \div \frac{1}{2} = 10$	$\frac{1}{4} \div 5 = \frac{1}{20}$ $\frac{1}{2} \div 6 = \frac{1}{12}$ $\frac{1}{3} \div 5 = \frac{1}{15}$ $\frac{1}{5} \div 2 = \frac{1}{10}$

Two-digit by four-digit multiplication

Multiply.

1,531	3,174	2,820
<u>× 25</u>	× 43	× 35
1,898	7,118	5,055
× 17	× 50	× 26
2,787	3,118	5,718
<u>× 49</u>	<u>× 89</u>	<u>× 77</u>



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Divide.

19)1,425	32)1,314	27)1,221
42)1,263	17)1,001	28)1,980
36)1,191	38)3,116	41)1,271
	18)1,152	53)1,601
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L Learning

Solve using the order of operations.

25 × 2 ÷ 5 – 8 = ____ (4 + 32) ÷ 6 × 2 = ____

$$27 \div (45 - 36) + 3 =$$
_____ $16 + 6^2 - 4 \div 2 =$ _____

35 ÷ (12 – 5) + 10 × 7 = _____ $9^2 - 12 \times 2 \div 6 =$ _____

44 – 12 × 2 + 5 × 15 = _____ 72 ÷ (4 + 15 – 7) = _____

IXL.com skill ID HGW

4 Adding and subtracting decimals

Add or subtract.

IXL.com

skill ID

7V.J

5.8 + 8.35 = _____ 18.46 – 12.9 = _____ 9.55 – 8.8 = _____ 76.3 – 34.59 = _____ 73.5 + 9.96 = _____ 6.36 + 13.9 = _____ 83 – 20.6 = _____ 76.7 + 3.47 = _____ 83.13 + 72.8 = _____ 130.58 – 7.6 = _____

87.6 + 49.99 = _____

5 Multiplying a decimal by a whole number

Multiply.

/ ∠.∠4 ^ 4 −	72.24 × 4 =		
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8.214 × 3 = _____

6.8 × 32 = _____

9.3 × 24 = _____

74 × 4.7 = _____

61 × 0.28 = _____

18.6 × 52 =_____

209 × 1.9 = _____



6 Multiplying a decimal by a decimal

Multiply.

5.3	6.3	4.5
<u>×2.4</u>	<u>×6.3</u>	<u>×2.1</u>
9.7	0.64	9.9
<u>×8.6</u>	<u>× 3.7</u>	×9.9
3.02	5.96	2.88
<u>× 1.4</u>	<u>× 2.2</u>	<u>× 4.6</u>
	7.65 <u>× 3.3</u>	9.89 <u>× 5.8</u>



7 Dividing a decimal by a decimal

Divide.

1.9)9.31	1.2)7.62	2.1)90.51
1.8)4.05	3.3)269.94	4.1) 115.62
3.4)25.5	2.4)81.84	2.5) 55.7
IXL.com skill ID	1.6)13.2	3.5)165.9
8FT		© 2020 IXL Lear

When you draw a point on a coordinate plane, you are *plotting* the point! Plot and label the points.



IXL.com skill ID **AST**

KEEP IT GOING! Come up with another ordered pair that's not on this page. Then plot it on the coordinate plane!

Add. Write your answer in simplest form.

$$\frac{1}{4} + \frac{1}{6} = \frac{3}{12} + \frac{2}{12} = \frac{5}{12}$$

$$\frac{1}{2} + \frac{2}{9} = \frac{3}{12} + \frac{1}{12} = \frac{1}{12} + \frac{$$

10 Adding and subtracting fractions

Add or subtract. Write your answer in simplest form.



11 Answer key	
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PAGE 1

1,531	3,174	2,820	72.24
<u>× 25</u> 38,275	<u>× 43</u> 136,482	<u>× 35</u> 98,700	8.214
1,898	7,118	5,055	6.8 × 3
× 17 32,266	× 50 355,900	<u>× 26</u> 131,430	9.3 × 2
2,787	3,118	5,718	74 × 4
<u>× 49</u>	<u>× 89</u>	<u>× 77</u>	61 × 0
136,563	277,502	440,286	18.6 ×

PAGE 2

75	41 R		PAGE
19) 1,425	32)1,314		5.3
30 R	3 58 R		× 2.4
42) 1,263	17) 1,001		12.72
33 R 36)1,191	3 82 38)3,116 64	31 41) 1,271 30 R11	9.7 <u>× 8.6</u> 83.42
	18)1,152	53)1,601	3.02 × 1.4

PAGE 3

2	12
6	50
77	75
95	6

PAGE 4

18.46 - 12.9 = 5.56 5.8 + 8.35 = 14.15

9.55 – 8.8 = 0.75 76.3 – 34.59 = 41.71

73.5 + 9.96 = 83.46 6.36 + 13.9 = 20.26

83 - 20.6 = 62.4

76.7 + 3.47 = 80.17

83.13 + 72.8 = 155.93 130.58 - 7.6 = 122.98

87.6 + 49.99 = 137.59

PAGE 5	
72.24 × 4 = 288.9	6
8.214 × 3 = 24.64	2
6.8 × 32 = 217.6	
9.3 × 24 = 223.2	
74 × 4.7 = 347.8	
61 × 0.28 = 17.08	5
18.6 × 52 = 967.2	
209 × 1.9 = 397.1	
PAGE 6	
5.3	6.3
0.0	0.0

× 6.3

39.69

0.64

× 3.7

2.368

5.96

× 2.2

13.112

7.65

× 3.3

25.245

6.35

81.8

34.1

8.25

1.2 7.620

3.3 269.94

2.4 81.84

1.6) 13.200

8 -7 -6 -

4.5

× 2.1

9.45

9.9

× 9.9

98.01

2.88

9.89

× 5.8

57.362

43.1

28.2

22.28

47.4

2.1) 90.51

4.1 115.62

2.5 55.700

3.5 165.90

× 4.6 13.248



PAGE 8, continued

shown below.

10

Answers will vary. One possible answer is

PAGE 9

$\frac{1}{4} + \frac{1}{6} = \frac{5}{12}$	$\frac{1}{2} + \frac{2}{9} = \frac{13}{18}$
$\frac{3}{8} + \frac{1}{6} = \frac{13}{24}$	$\frac{3}{4} + \frac{1}{12} = \frac{5}{6}$
$\frac{1}{10} + \frac{1}{4} = \frac{7}{20}$	$\frac{2}{3} + \frac{1}{8} = \frac{19}{24}$
$\frac{1}{3} + \frac{2}{5} = \frac{11}{15}$	$\frac{3}{5} + \frac{2}{7} = \frac{31}{35}$
$\frac{5}{12} + \frac{3}{8} = \frac{19}{24}$	$\frac{2}{11} + \frac{3}{4} = \frac{41}{44}$

PAGE 10

$\frac{1}{5} + \frac{3}{7} = \frac{22}{35}$	$\frac{4}{5} - \frac{1}{4} = \frac{11}{20}$
$\frac{1}{9} + \frac{2}{3} = \frac{7}{9}$	$\frac{8}{11} - \frac{1}{2} = \frac{5}{22}$
$\frac{5}{6} - \frac{4}{7} = \frac{11}{42}$	$\frac{1}{10} + \frac{2}{5} = \frac{1}{2}$
$\frac{3}{8} + \frac{1}{3} = \frac{17}{24}$	$\frac{8}{9} - \frac{3}{4} = \frac{5}{36}$
$\frac{5}{6} - \frac{1}{8} = \frac{17}{24}$	$\frac{3}{10} + \frac{7}{12} = \frac{53}{60}$

PAGE 8

4.228

PAGE 7 4.9

1.9 9.31

1.8 4.050

3.4 25.50

2.25

7.5

