

Rising Math 7 Summer Math Packet

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STUDENT NAME:

Instructions: Use the summer to work through the 50 questions in this packet. Show all of your work for full credit. These problems do not require a calculator to solve. Answers will be reviewed the first week of the new school year. The recommended completion time is before school starts in August.

1. Give the digits in the thousands place and the hundreds place.

5,264

thousands:

hundreds:

2. Use $<$, $>$, or $=$ to compare the numbers.

63 95

9 57

330 46

885 832

3. Order these numbers from least to greatest.

460,331 18,262 243,096 7,351

4. Round 674 to the nearest ten.

5. Round 4,841 to the nearest hundred.

6. Round 453,689 to the nearest thousand.

7. Evaluate $39 - 6 \times 4$.

8. Evaluate $3 + (8 \div 2)$.

9. Evaluate the following.

$$4 \times 4 - 3 - 12 \div 2$$

10. Evaluate the following expression.

$$7 \times [(15 + 3) \div 3 - 2]$$

11. Evaluate.

$$3 + 4^2 \cdot 2$$

12. Answer the questions below. Be sure to mark *all* answers that apply.

	230	319	318	None of these
Which numbers are divisible by 5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which numbers are divisible by 2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which numbers are divisible by 10?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Answer the questions below. Be sure to mark *all* answers that apply.

	450	468	444	None of these
Which numbers are divisible by 3?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Which numbers are divisible by 9?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Write all the factors of 20.
Use commas to separate them.

15. Put a check by all the prime numbers.

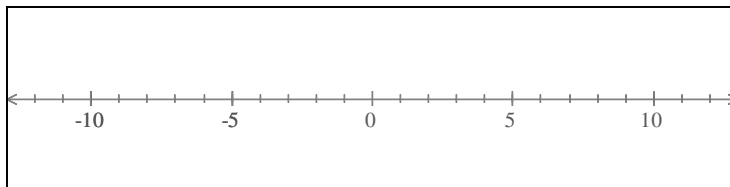
<input type="checkbox"/>	2
<input type="checkbox"/>	4
<input type="checkbox"/>	15
<input type="checkbox"/>	17
<input type="checkbox"/>	22
<input type="checkbox"/>	24
<input type="checkbox"/>	None of the above

16. Find the greatest common factor of 32 and 36.

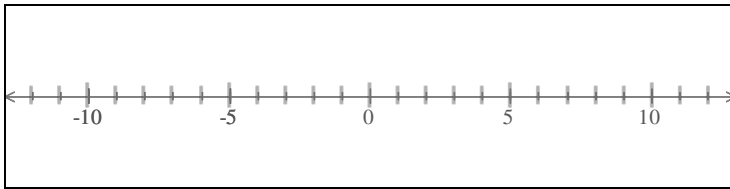
17. Find the least common multiple (LCM) of 9 and 12.

18. Find the least common multiple of 15, 6, and 2.

19. Plot 1, 11, and -8 on the number line.



20. On the number line below, plot -3 and the opposite of -3 .



21. Fill in the blanks below.

(a) A growing animal gained 9 pounds.
Write a signed number to represent this weight change.

||

(b) Charmaine lost 55 dollars from her pocket.
Write a signed number to represent this change.

||

22. Solve for x .

$$12 = 4 \times x$$

23. Translate this sentence into an equation.

52 is the sum of 20 and Helena's savings.

Use the variable h to represent Helena's savings.

24.

True or False?

Expressions and equations both have an equal sign.	<input type="radio"/> True <input type="radio"/> False
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Expression or equation?

$x + 9 = 16$	<input type="radio"/> Expression <input type="radio"/> Equation
$-4 \times 8 = -32$	<input type="radio"/> Expression <input type="radio"/> Equation
$w \div 9 + 23$	<input type="radio"/> Expression <input type="radio"/> Equation

25. Fill in the blank to make the fractions equivalent.

$$\frac{8}{12} = \frac{\quad}{3}$$

26. Fill in the blank to make the two fractions equivalent.

$$\frac{3}{4} = \frac{\quad}{24}$$

27. Write the fraction $\frac{20}{36}$ in simplest form.

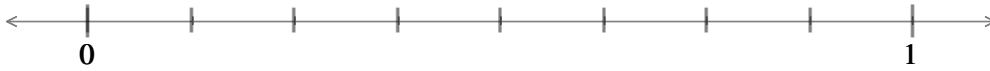
28. Choose *all* fractions equivalent to each given fraction.

Given fraction	Check <i>all</i> fractions that are equivalent to the given fraction.
$\frac{-8}{9}$	<input type="checkbox"/> $-\frac{8}{9}$ <input type="checkbox"/> $\frac{8}{-9}$ <input type="checkbox"/> $\frac{-8}{-9}$ <input type="checkbox"/> $\frac{8}{9}$

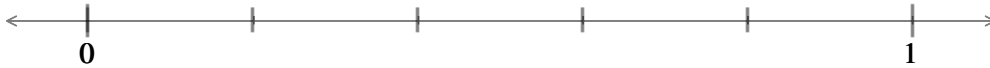
Given fraction	Check <i>all</i> fractions that are equivalent to the given fraction.
$\frac{3}{10}$	<input type="checkbox"/> $\frac{-3}{10}$ <input type="checkbox"/> $\frac{3}{-10}$ <input type="checkbox"/> $\frac{-3}{-10}$ <input type="checkbox"/> $-\frac{3}{10}$

29.

Plot $\frac{6}{8}$.



Plot $\frac{2}{5}$.



30. Let's compare $\frac{3}{4}$ and $\frac{7}{10}$. First, write the fractions with the same denominator.

$$\frac{3}{4} = \frac{\square}{\square} \quad \frac{7}{10} = \frac{\square}{\square}$$

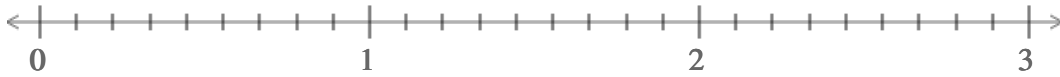
Then, use $<$, $=$, or $>$ to compare the fractions.

$$\frac{3}{4} \square \frac{7}{10}$$

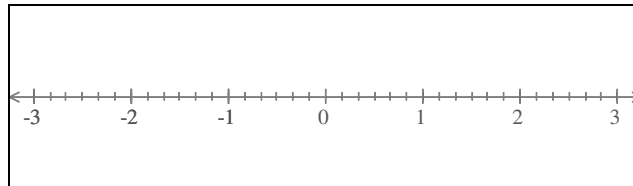
31. Write $\frac{13}{7}$ as a mixed number.

32. Write $3\frac{6}{7}$ as an improper fraction.

33. Plot $2\frac{7}{9}$ and $1\frac{1}{3}$.



34. Plot the numbers $-2\frac{2}{3}$ and $\frac{5}{6}$ on the number line below.



35. Subtract. Write your answer as a fraction in simplest form.

$$\frac{7}{10} - \frac{3}{10}$$

36. Find the least common denominator (LCD) of $\frac{3}{10}$ and $\frac{9}{8}$.

37. Subtract.

$$\frac{7}{8} - \frac{7}{12}$$

Write your answer as a fraction in simplest form.

38. Multiply.

$$\frac{5}{9} \times \frac{7}{8}$$

39. Multiply. Write your answer as a fraction in simplest form.

$$\frac{3}{4} \times \frac{5}{6}$$

40. Find the reciprocals of the numbers below.

The reciprocal of $\frac{10}{11}$ is .

The reciprocal of 5 is .

41. Divide. Write your answer in simplest form.

$$5 \div \frac{1}{9} =$$

$$\frac{1}{9} \div 5 =$$

42. Divide. Write your answer in simplest form.

$$\frac{2}{3} \div 9$$

43. Divide. Write your answer in simplest form.

$$\frac{2}{9} \div \frac{5}{12}$$

44. Give the digits in the tens place and the hundredths place.

26.58

45. Find the digits in the tens place, in the hundredths place, and in the ten thousandths place for the following number.

867.8062

tens:

hundredths:

ten thousandths:

46. Multiply.

$$6.794 \times 10$$

47. Use $<$, $>$, or $=$ to compare the following decimals.

$$0.51 \square 0.54$$

$$9.05 \square 9.3$$

$$9.50 \square 9.5$$

48. Divide.

$$4.52 \div 100$$

49. Solve for y .

$$y + 5.74 = 9.62$$

50. Solve for v .

$$\frac{v}{4} = 6.4$$