

Summer 2022
Grade 7
Math Summer Packet

Name _____

Your workbook will be a great resource to help you with the summer packet. There are a few things we did not cover in grade 6, but you have covered in the past grades. Do your best! Circle the best answer. If you need more space, show your work on looseleaf.

1. What is the standard form of

$$(7 \times 10^2) + (8 \times 10^0) + (3 \times 10^{-2})?$$

- A. 708.03 B. 708.3
C. 780.03 D. 780.3

6. Divide.

$$240,376 \div 4$$

- F. 694 G. 6,094
H. 60,094 J. not given

2. Which numbers are in order from greatest to least?

- F. 0.2422, 0.24, 0.242, 0.0722
G. 0.0722, 0.24, 0.242, 0.2422
H. 0.2422, 0.242, 0.24, 0.0722
J. 0.0722, 0.2422, 0.242, 0.24

7. Divide.

$$3.5028 \div 0.07$$

- A. 50.3
B. 50.04
C. 50.03
D. 5.004

3. What is the value of $13.9 - c + d$ when $c = 0.65$ and $d = 3.07$?

- A. 17.62
B. 16.32
C. 11.48
D. 10.18

8. What is the value of $36 \div c \cdot d$ when $c = 0.4$ and $d = 200$?

- F. 0.18
G. 288
H. 4,500
J. 18,000

4. Multiply.

$$0.72 \cdot 0.84$$

- F. 0.5048 G. 0.6048
H. 6.048 J. 60.48

9. Simplify.

$$5 + (50 - 2) \div 8 + (2.7 + 4)$$

- A. 13.325 B. 13.825
C. 17.7 D. not given

10. Ed buys packages of 8 hamburger rolls. He buys p packages. Which expression represents how many rolls he buys?

- F. $8p$
G. $8 + p$
H. $8 \div p$
J. $8 - p$

11. Solve.

$$200 = 80n$$

- A. $n = 2.5$
- B. $n = 120$
- C. $n = 280$
- D. $n = 16,000$

16. What is the greatest common factor (G) of 8, 24, and 32?

- F. 2
- G. 4
- H. 8
- J. 16

12. Which numbers are in order from least to greatest?

- F. 12, 8, -16, -29
- G. -29, -16, 8, 12
- H. 8, 12, -16, -29
- J. 8, 12, -29, -16

17. Which numbers are in order from least to greatest?

- A. $\frac{1}{6}$, 0.25, $\frac{3}{8}$, 0.4
- B. 0.4, $\frac{3}{8}$, 0.25, $\frac{1}{6}$
- C. $\frac{1}{6}$, $\frac{3}{8}$, 0.25, 0.4
- D. 0.25, $\frac{1}{6}$, 0.4, $\frac{3}{8}$

13. Multiply.

$$6(-9)(-11)$$

- A. -594
- B. -65
- C. 65
- D. 594

18. Solve.

$$\left(\frac{5}{12} + \frac{2}{12}\right) + \frac{4}{12} = \frac{5}{12} + \left(z + \frac{4}{12}\right)$$

- F. $z = 1\frac{2}{3}$
- G. $z = \frac{5}{12}$
- H. $z = \frac{4}{12}$
- J. $z = \frac{1}{6}$

14. Divide.

$$-24 \div (-3)$$

- F. -8
- G. 3
- H. 8
- J. 72

19. Add.

$$\frac{11}{20} + \frac{3}{5} + \frac{1}{2}$$

- A. $1\frac{7}{10}$
- B. 1
- C. $1\frac{9}{20}$
- D. 1

15. What is the prime factorization of 63?

- A. $21 \cdot 3$
- B. $9 \cdot 7$
- C. $3^3 \cdot 7$
- D. $3^2 \cdot 7$

20. Subtract.

$$11\frac{5}{7} - 9\frac{6}{7}$$

- F. $2\frac{1}{7}$
- G. $1\frac{6}{7}$
- H. $1\frac{1}{7}$
- J. $2\frac{6}{7}$

21. Multiply.

$$\frac{4}{5} \cdot 9 \cdot 25$$

- A. $7\frac{1}{5}$
- B. 144
- C. 180
- D. 4500

26. What percent is equal to $\frac{3}{5}$?

- F. 0.6%
- G. 6%
- H. 60%
- J. 0.006%

22. Divide.

$$3\frac{1}{2} \div 1\frac{1}{3}$$

- F. $4\frac{2}{3}$
- G. $2\frac{5}{8}$
- H. $\frac{8}{21}$
- J. $\frac{3}{14}$

2

2

28. How many inches are in $6\frac{1}{4}$ feet?

- F. 12 in.
- G. $36\frac{1}{4}$ in.
- H. 75 in.
- J. 76 in.

24. What type of angle is a 75° angle?

- F. right
- G. obtuse
- H. acute
- J. straight

25. Solve.

$$9 : 4 = n : 72$$

- A. $n = 18$
- B. $n = 162$
- C. $n = 182$
- D. $n = 648$

Write each in standard form.

1. $(5 \times 10^4) + (6 \times 10^1) + (7 \times 10^{-2})$

2. $(2 \times 10^5) + (3 \times 10^3) + (3 \times 10^0)$

Order from greatest to least.

3. 7.21, 7, 7.2, 7.05

4. 0.54, 0.5469, 0.5462, 0.559

Evaluate each equation when $c = 0.5$ and $d = 30$.

5. $9 + c + d$

6. $10d \div c$

7. $d \div c \cdot 300$

Multiply.

8. $(6.2)(9.4)$

9. $-25(14)$

10. $-16(-11)$

Divide.

11. $30,139 \div 93$

12. $8.93 \div 4.7$

13. $-80 \div 5$

Write in scientific notation.

14. ~~$35,500,000$~~

15. ~~$248,000,000$~~

16. ~~$8,950,000$~~

Simplify.

17. $12 - 3 \cdot 2 + 2^3$

18. $10 \cdot 3 + (48 \div 6)^2 \cdot 0.4$

Write and solve an equation for each problem.

19. Juan buys 4 DVDs at \$15 each. How much does Juan pay in all?

20. A ribbon is 165 cm long. It is cut in 15 equal pieces. How long is each;

Find the prime factorization in exponential form.

21. 36

22. 189

23. 60

Find the greatest common factor.

24. 80 and 100

25. 48 and 84

26. 14, 49, and 105

Write in order from least to greatest.

27. $-2\frac{3}{4}$, 4.5, $-1\frac{1}{3}$

28. $\frac{3}{2}$, $-3\frac{1}{2}$, 4

29. $-\frac{3}{5}$, -1.2, $-6\frac{1}{2}$

Find the value of the variable. Use the properties of addition.

30. $z + \frac{5}{7} = \frac{5}{7} + \frac{1}{7}$

31. $\frac{3}{16} + \left(\frac{5}{16} + 0\right) = \frac{3}{16} + n$

Add or subtract.

32. $\frac{1}{12} + \frac{2}{3} + \frac{1}{4}$

33. $10\frac{1}{4} - 5\frac{2}{3}$

34. $8\frac{1}{6} - 3\frac{3}{4} + 2\frac{1}{2}$

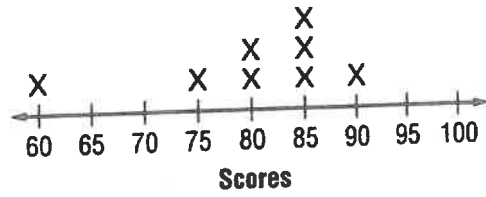
Multiply or divide.

35. $\frac{7}{9} \cdot 27 \cdot 4$

36. $1\frac{1}{3} \div 2\frac{2}{5}$

37. $3\frac{1}{4} \div 1\frac{1}{2}$

Test Scores

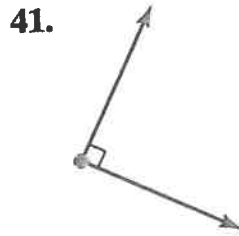


Use the line plot to answer questions 38 and 39.

38. What score is an outlier? _____

39. What is the mean? _____

Classify each angle as right, acute, obtuse, or straight.



Find the value of n .

43. $\frac{12}{4} = \frac{18}{n}$

44. $8:3 = n:12$

45. $17:3 = n:1.5$

Write each fraction as a percent and a decimal.

46. $\frac{6}{10}$

47. $\frac{9}{20}$

48. $\frac{5}{8}$

Solve and check.

59. $v + 16.5 = 40.3$

60. $t - 3.2 = -7.6$

61. $\frac{x}{8.9} = 2.4$

62. $8.93 = -4.7y$

63. $13.6z - 11 = -1.48$

64. $\frac{m}{-5.4} + 37.3 = 36.8$

Circle the best answer.

1. Which integer corresponds to point *M* on the number line?



6. Subtract.

$$-21 - 5$$

2. What is the opposite of $|-8|$?

7. Find the product.

$$-4(15)$$

3. Which numbers are in order from least to greatest?

- A. $-3, |-3|, -|5|, -6$
- B. $-6, -3, -|5|, |-3|$
- C. $-6, -|5|, -3, |-3|$
- D. $|-3|, -3, -|5|, -6$

8. What is the missing factor?

$$-9 \cdot \underline{\quad} = 63$$

4. Find the sum.

$$-17 + (-5)$$

9. Find the quotient.

$$125 \div (-5)$$

5. Add.

$$6 + (-10) + (-7)$$

10. Divide.

$$-84 \div |-7|$$

Circle the best answer.

11. Which property is demonstrated by the equation?

$$-8(-6 + 5) = -8(-6) + (-8)(5)$$

16. Simplify.

$$2^5 \div (2^2 + 12)(-1)^3$$

12. What is 7^4 in factored form?

13. Simplify.

$$3^7 \div 3^5$$

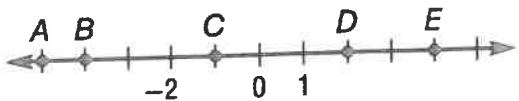
14. What is the value of 17^0 ?

15. Simplify.

$$6^2 \div (4 - 3) + (4 \times 3)$$

20. Jeremy tracked the temperature as a weather front crossed his region. The temperature rose 12 degrees, fell 27 degrees, and finally rose 4 degrees. If the starting temperature was 7°C , what was the ending temperature?

Write the integer that corresponds to each letter on the number line.



1. A _____
 2. B _____
 3. C _____
 4. D _____
 5. E _____

Find the sum or difference.

6. $34 + (-12)$ _____
 7. $-9 - 8$ _____
 8. $-20 + 15$ _____

Find the product or quotient.

9. $28 \div (-2)$ _____
 10. $-6(-11)$ _____
 11. $\frac{-36}{4}$ _____

Name the property and find the value of n .

12. $-8(13 + 4) = (-8n) + (-8 \cdot 4)$ _____
 13. $0 = -113n$ _____

Evaluate each expression when $x = 2$ and $y = -5$.

23. $3(x + y)$ _____
 24. $\frac{xy}{5}$ _____
 25. $y - x$ _____

Solve and check.

26. $p - 7 = -3$ _____
 27. $n - |-19| = 22$ _____
 28. $-35 = m + 4$ _____
 29. $-8r = 104$ _____
 30. $s(-20) = 160$ _____
 31. $\frac{t}{-9} = -6$ _____
 32. $\frac{x}{7} + 15 = 0$ _____
 33. $-6 = 4y - 2$ _____
 34. $7z - 32 = -11$ _____

All Operations with Integers

Use an integer strategy to find each answer.

$6 \div 2 =$

$(-1) + 9 =$

$(-9) \times 10 =$

$(-8) + 2 =$

$(-88) \div (-11) =$

$8 \times 10 =$

$(-10) - (-7) =$

$5 + (-8) =$

$(-9) \times 6 =$

$(-2) + (-4) =$

$(-11) + (-9) =$

$(-10) + (-6) =$

$(-12) + 7 =$

$6 \times 9 =$

$2 - (-6) =$

$9 - 11 =$

$8 \times (-10) =$

$(-2) + 3 =$

$12 \times (-6) =$

$(-11) + 4 =$

$(-8) - (-4) =$

$4 - 5 =$

$11 \div 11 =$

$(-32) \div 8 =$

$24 \div (-4) =$

$3 + 11 =$

$3 \times (-7) =$

$9 \times 9 =$

$7 \times 6 =$

$3 + 1 =$

All Operations with Integers

Use an integer strategy to find each answer.

$(-45) \div (-5) =$

$4 - (-4) =$

$(-4) + 8 =$

$(-8) \div (-2) =$

$(-110) \div (-11) =$

$1 + (-11) =$

$(-5) - (-5) =$

$(-12) + (-1) =$

$4 + 6 =$

$(-80) \div (-8) =$

$5 + 9 =$

$(-6) - 12 =$

$10 - 2 =$

$4 - 11 =$

$9 + 9 =$

$28 \div (-4) =$

$(-132) \div (-12) =$

$(-2) + 1 =$

$1 \times 3 =$

$(-3) + 3 =$

$(-11) \times (-7) =$

$4 \div 1 =$

$10 \times (-4) =$

$(-6) - (-9) =$

$(-8) - (-8) =$

$12 \times 8 =$

$10 - 9 =$

$(-3) \times (-3) =$

$(-24) \div 4 =$

$4 - 8 =$

All Operations with Integers

Use an integer strategy to find each answer.

$7 \times 9 =$	$(-11) + (-1) =$	$8 \times (-2) =$
$(-2) \times 10 =$	$80 \div 10 =$	$1 \times 12 =$
$5 + (-10) =$	$(-88) \div 8 =$	$4 + (-1) =$
$5 - 4 =$	$36 \div (-9) =$	$8 \times (-5) =$
$10 \div (-1) =$	$8 \times 4 =$	$25 \div 5 =$
$6 + 6 =$	$1 + (-1) =$	$96 \div 8 =$
$(-4) - (-9) =$	$(-11) \times (-11) =$	$(-108) \div 12 =$
$(-3) \times 8 =$	$(-7) \times 3 =$	$(-7) \times (-5) =$
$(-7) - (-6) =$	$1 - (-5) =$	$(-9) + 7 =$
$9 - (-1) =$	$3 - 11 =$	$3 + 6 =$

All Operations with Integers

Use an integer strategy to find each answer.

$8 + 10 =$	$10 + 9 =$	$2 - 5 =$
$7 + (-8) =$	$16 \div (-4) =$	$9 - (-11) =$
$7 + 6 =$	$8 \times (-10) =$	$4 - (-6) =$
$(-3) + 11 =$	$(-2) + 5 =$	$20 \div (-2) =$
$(-8) \times 4 =$	$(-9) \times 6 =$	$(-1) \times (-10) =$
$3 + (-11) =$	$1 \times (-7) =$	$1 - (-9) =$
$(-8) \times (-4) =$	$(-7) \times (-3) =$	$8 + (-2) =$
$35 \div 5 =$	$7 - 6 =$	$5 - (-3) =$
$(-7) - 7 =$	$9 - 8 =$	$3 - (-6) =$
$2 \times 8 =$	$4 - 10 =$	$(-11) + 4 =$

All Operations with Integers

Use an integer strategy to find each answer.

$$(-11) + 9 =$$

$$(-4) + 2 =$$

$$(-18) \div (-9) =$$

$$(-6) - (-7) =$$

$$(-3) \times (-7) =$$

$$12 \times 7 =$$

$$7 \times 1 =$$

$$4 \times (-8) =$$

$$4 \times (-4) =$$

$$8 + (-12) =$$

$$(-12) \times (-8) =$$

$$40 \div (-8) =$$

$$42 \div 6 =$$

$$3 + 8 =$$

$$(-4) + 3 =$$

$$(-5) \times (-2) =$$

$$(-42) \div 7 =$$

$$(-6) - 5 =$$

$$3 \times (-4) =$$

$$(-45) \div (-5) =$$

$$10 \times (-10) =$$

$$(-7) - 11 =$$

$$20 \div 4 =$$

$$11 - 8 =$$

$$40 \div 5 =$$

$$(-1) + (-10) =$$

$$16 \div 2 =$$

$$60 \div 5 =$$

$$(-2) \div 1 =$$

$$(-100) \div (-10) =$$

All Operations with Integers

Use an integer strategy to find each answer.

$$(-9) \times 2 =$$

$$(-12) + (-9) =$$

$$(-9) + 12 =$$

$$(-2) - (-8) =$$

$$4 \times 7 =$$

$$11 \times 8 =$$

$$6 - (-4) =$$

$$9 - 10 =$$

$$5 - (-10) =$$

$$6 \times 3 =$$

$$(-12) - (-1) =$$

$$2 - (-7) =$$

$$(-72) \div 6 =$$

$$(-9) \div (-3) =$$

$$9 - 2 =$$

$$9 - (-5) =$$

$$(-108) \div (-9) =$$

$$(-4) \times (-8) =$$

$$20 \div (-4) =$$

$$7 - 10 =$$

$$8 \times 4 =$$

$$(-6) - (-11) =$$

$$27 \div 9 =$$

$$11 + 1 =$$

$$9 - 10 =$$

$$10 - 2 =$$

$$1 + 3 =$$

$$(-6) \times 11 =$$

$$(-1) \times 6 =$$

$$4 - 11 =$$

