

WS 83

8. Copy each equation. Replace \square with an integer to make the equation true.

a) $(+4) \times \square = -32$

b) $\square \times (-6) = +54$

c) $(-8) \times \square = -56$

d) $\square \times (-1) = +12$

9. Write 2 related multiplication equations for each division equation.

a) $(+27) \div (+3) = +9$

b) $(+14) \div (-7) = -2$

$(+9) \times (+3) = (+27)$

$(+3) \times (+9) = (+27)$

c) $(-21) \div (-3) = +7$

d) $(-26) \div (+2) = -13$

10) Find the answer to division.

Write each division as 2 multiplication equations

Model division on a number line

a) $(+20) \div (+4)$

b) $(-24) \div (-6)$

c) $(-36) \div (+4)$

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11. The water level in a well dropped 5 cm each hour. The total drop in the water level was 30 cm. Use integers to find how long it took for the water level to change.
Write an equation and state the answer in sentence form.

12) Write an equation for the following word problem and state the answer in sentence form.

Maurice spent a total of \$18 in 3 days, then how much did he spend per day?

13) Raj made withdraws of \$19 from his account. He withdrew a total of \$133. Use integers to find out how many withdraws Raj made. (Write an equation)

14) a) $(-8) \div (-4)$ b) $\frac{-9}{+3}$ c) Divide: $\frac{+96}{-6}$

15) Find the answer

- a) $(-45) \div (+5)$
- b) $(+16) \div (+8)$
- c) $(+24) \div (-2)$
- d) $(-30) \div (-6)$

16) Find the quotient

- a) $(+12) \div (+4)$
- b) $(-15) \div (-3)$
- c) $(-18) \div (+9)$
- d) $(+81) \div (-9)$
- e) $(+72) \div (-8)$
- f) $(-64) \div (-8)$
- g) $(-14) \div (+1)$
- h) $(+54) \div (-6)$
- i) $(-27) \div (-3)$
- j) $(+32) \div (+4)$

17. a) Use each multiplication fact to find a related quotient.

i) Given $(+8) \times (+3) = +24$,
find $(+24) \div (+3) = \square$.

ii) Given $(-5) \times (-9) = +45$,
find $(+45) \div (-9) = \square$.

iii) Given $(-7) \times (+4) = -28$,
find $(-28) \div (+4) = \square$.

18) Write 2 related division facts for each multiplication fact.

a) $(-6) \times (+5) = -30$ b) $(+7) \times (+6) = +42$

c) $(+9) \times (-4) = -36$ d) $(-4) \times (-8) = +32$

19. Divide.

a) $\frac{-20}{-5}$ b) $\frac{+21}{-7}$

c) $\frac{-36}{+4}$ d) $\frac{0}{-8}$

20.) Copy each equation. Replace \square with an integer to make the equation true.

a) $(+25) \div \square = +5$

b) $\square \div (-9) = +10$

c) $(-63) \div \square = -7$

d) $\square \div (-3) = +7$

e) $\square \div (+5) = -12$

f) $\square \div (-7) = -7$

g) $\square \div (-6) = +8$

h) $\square \div (-4) = -11$

21.) Nirmala borrowed \$7 every day. She now owes \$56. For how many days did Nirmala borrow money?

- a) Write this problem as a division expression using integers.
- b) Solve the problem.

22) The temperature dropped a total of 15°C over a 5-h period. The temperature dropped by the same amount each hour. Find the hourly drop in temperature.

23) **Assessment Focus** Suppose you divide two integers. The quotient is an integer. When is the quotient:

- a) less than both integers?
- b) greater than both integers?
- c) between the two integers?
- d) equal to $+1$?
- e) equal to -1 ?
- f) equal to 0 ?

Use examples to illustrate your answer
Show your work.