

Test 23

SHOW YOUR WORK

Name: _____

- The sum of twice a number and 17 is -19 . Find the number.
- The number of bacteria increased 210 percent overnight. If there were 75,000 bacteria yesterday, how many bacteria were there this morning?
- The ratio of musicians to actors was 2 to 3. If there were 72 actors, how many musicians were there?
- Complete the table. Begin by inserting the reference numbers.
- Find the volume of this right circular cylinder. Dimensions are in feet. Use 3.14 for π .

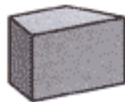
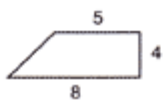
FRACTION	DECIMAL	PERCENT
(a)	0.675	(b)
$\frac{2}{5}$	(c)	(d)
(e)	(f)	20%



- Last month's phone bill was \$150. This month's phone bill is \$204. What percent of last month's phone bill is this month's phone bill?
- Graph on a number line: $x \geq -1$
- (a) One hundred seventy percent of 40 is what number?
(b) What percent of 40 is 72?
(c) Three hundred eighty percent of what number is 570?

Evaluate:

- $-wx - w$ if $w = 3$ and $x = -4$
- $\sqrt[3]{s} + s^t$ if $r = 4$, $s = 16$, and $t = 2$
- The two-dimensional drawing shows a base of a right solid that is 11 meters tall. Find the volume of the solid. Dimensions are in meters. All right angles that look like right angles are right angles.
- Find the surface area of this right triangular solid. Dimensions are in inches.



13. Find
- r
- and
- s
- .



14. Solve: $-2\frac{1}{2}x - 2\frac{3}{4} = 1\frac{1}{8}$

15. Graph the line
- $y = x + 4$
- . Choose 0, 4, and
- -4
- for
- x
- values.

16. Between which two consecutive integers is
- $\sqrt{68}$
- ?

Simplify:

17. $\left(\frac{2}{5}\right)^2$

18. $-2(-5 - 3 + 4) - [(-5 - 5) \cdot (-5)]$

19. (a) $\sqrt[4]{16}$ (b) $\sqrt{49}$

20. $-5(-2 - 5 + 5) - [(-2 - 4) \cdot 3]$