

DSPM 0700 TEST 3 REVIEW

Write the decimal in words.

1) 1.245

Write the decimal in numbers.

2) Eight and seventeen hundredths

Write the decimal as a fraction or mixed number in lowest terms.

3) 0.46

4) -0.346

Insert $<$, $>$, or $=$ between the pair of numbers to form a true statement.

5) -0.54 _____ -0.53

6) 0.141 _____ 0.143

7) $\frac{37}{5}$ _____ 7.401

Perform the indicated operation.

8) $115.4 + 0.8 + 93.45 + 89.9$

Evaluate the expression for the given replacement values.

9) $y - x + z$ for $x = 6.1$, $y = 8$, $z = 0.91$

10) $x \div y$ for $x = 1.45$, $y = 2.9$

Simplify by combining like terms.

11) $23.3x - 11.1 - 14.7x + 19$

Solve.

12) Find the total monthly cost of owning and maintaining a car given the information shown.

Monthly car payment:	\$372.63
Monthly insurance cost:	\$60.00
Average cost of gas per month:	\$86.20
Average upkeep cost per month:	\$19.50

13) Last year, Karl's average credit card bill was \$128.75. In October, his credit card bill was \$167.95. How much more than last year's average was the October bill?

Multiply.

14) $(16.6)(-1.72)$

Divide.

15) $6.4 \div 0.8$

Simplify the expression.

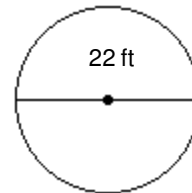
16) $(-3.8)^2$

17) $-1.1(4.4 - 5.2)$

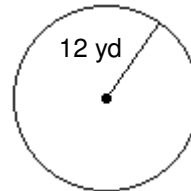
Find the circumference of the circle using 3.14 for π .

Formula: $C = 2\pi r$ or $C = \pi d$

18)



19)



Determine whether the given value is a solution to the given equation. Show all work.

20) Is .6 a solution of $-6.5x = -3.9$?

21) Is .7 a solution of $7x = 49$?

Write the fraction as a decimal.

22) $\frac{1}{2}$

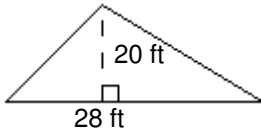
Arrange the list of numbers in order from smallest to largest.

23) 2.09, 2.9, 2.099, 2.999

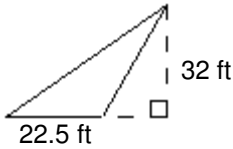
24) $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{3}$, 0.95

Find the area of the triangle. Formula: $A = \frac{1}{2} * \text{base} * \text{height}$

25)



26)



Solve the equation.

27) $9x + 6.8 = 5x + 12$

28) $9(3x - 0.3) = 4x - 2.7$

29) $0.7x + 0.3 = -0.4$

30) $4(x - 1.8) = 9.3$

31) $x + 2.7 = 8.4$

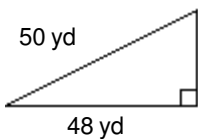
Find the square root.

32) $\sqrt{256}$

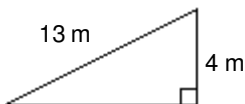
33) $\sqrt{\frac{1}{100}}$

Using the given lengths of a right triangle, find the length of the side not given. Formula: $a^2 + b^2 = c^2$

34)



35)



36) leg = 15, leg = 20

Write the ratio using fractional notation. Do not simplify.

37) 9 to 14

Write the rate as a unit rate.

38) 200 miles on 8 gallons of gas

Find the unit price.

39) \$49.50 for 5 video tapes

40) Find which is the better buy (lower cost per ounce) by finding each unit price rounded to three decimal places if necessary. Assume that different sizes of the same brand are being compared.

Soy sauce:
\$1.74 for 29 ounces
\$2.02 for 31 ounces

Write the sentence as a proportion.

41) 18 children is to 30 bicycles as 3 children is to 5 bicycles

Determine whether the proportion is true or false. Show all work.

42) $\frac{15}{6} = \frac{5}{2}$

43) $\frac{6}{16} = \frac{4}{9}$

Solve the proportion for the given variable.

44) $\frac{x}{6} = \frac{20}{24}$

45) $\frac{24}{6} = \frac{28}{x}$

46) $\frac{5}{\frac{5}{8}} = \frac{40}{x}$

47) $\frac{7}{x} = \frac{0.4}{3.2}$

Solve.

48) The ratio of a quarterback's completed passes to attempted passes is 3 to 4. If he attempted 20 passes, find how many passes he completed.

49) It takes Sarah 18 minutes to type and spell check 10 pages of a manuscript. Find how long it takes her to type and spell check 45 pages.

Answer Key

Testname: DSPM700TEST3REVIEW

- 1) one and two hundred forty-five thousandths
- 2) 8.17
- 3) $\frac{23}{50}$
- 4) $-\frac{173}{500}$
- 5) <
- 6) <
- 7) <
- 8) 299.55
- 9) 2.81
- 10) 0.5
- 11) $8.6x + 7.9$
- 12) \$538.33
- 13) \$39.20
- 14) -28.552
- 15) 8
- 16) 14.44
- 17) 0.88
- 18) 69.08 ft
- 19) 75.36 yd
- 20) Yes
- 21) No
- 22) 0.5
- 23) 2.09, 2.099, 2.9, 2.999
- 24) $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, 0.95$
- 25) 280 sq. ft
- 26) 360 sq. ft
- 27) 1.3
- 28) 0
- 29) -1
- 30) 4.125
- 31) 5.7
- 32) 16
- 33) $\frac{1}{10}$
- 34) 14 yd
- 35) 12.369 m
- 36) 25
- 37) $\frac{9}{14}$
- 38) 25 miles/gallon
- 39) \$9.90/video tape
- 40) \$1.74 for 29 ounces
- 41) $\frac{18}{30} = \frac{3}{5}$
- 42) True
- 43) False
- 44) 5
- 45) 7
- 46) 5
- 47) 56
- 48) 15 passes
- 49) 81 min