Eighth Grade Assessment Test — Teacher's Version

Notes for the teacher:

- This test should be given at the end of eighth grade, or at the start of ninth grade.
- This test does not represent the typical level of difficulty of math problems for eighth grade. It should be easy for the students.
- The student's version of the test should leave plenty of room for student work.

Calculators ARE NOT permitted on #1-31

1) $\frac{5}{11} + \frac{2}{11}$

2) $\frac{5}{11} \cdot \frac{2}{11}$

3) $5\frac{3}{5} + 1\frac{6}{7}$

4) $(2\frac{2}{3})^2$

5) $\frac{7}{8} - \frac{1}{3}$

6) $\frac{2}{5} \div \frac{3}{4}$

7) $(7\frac{1}{2})(\frac{4}{5})$

8) Reduce $\frac{72}{168}$

9) 84.3 + 9.84

10) 84.3 · 9.84

11) $\sqrt{64000000}$

12) Convert $\frac{53}{1000}$ to a decimal.

13) Convert 0.08 to a reduced fraction.

14) 20 ÷ 0.05

15) $(0.02)^3$

16) Convert $^3/_5$ to a percent:

17) Convert 0.032 to a percent:

18) What is 25% of 18?

19) What is 5% of 14?

20) 70 is what % of 350?

21) What is 240 decreased by 10%?

22) 48 inches = _____ feet

23) 26 m = _____ cm

24) 370 g = _____ kg

Simplify each expression.

25) –9 + 7

26) –6 – 12

27) –14 + 5 + 10

28) (–5)(–6)

29) $\frac{-32}{-4}$

Solve for X.

30) –2X – 3 = 5X + 25

31) 10 – 4(x – 1) = 5(2 – 5x)

Calculators ARE permitted on #32-40

1 inch ≈ 2.54 cm — 1 kg ≈ 2.2 pounds

1 m ≈ 3.28 feet — 1 mile = 5280 feet

If helpful, you may use the above conversion facts for the following problems.

32) 17 inches ≈ _____ cm

33) 300 pounds ≈ _____ kg

34) 17 km ≈ _____ feet

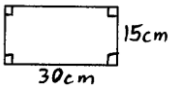
35) A plane flew 2100 miles in 5 hours. What was its average speed?

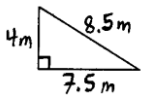
36) Jill's car has a fuel efficiency of 47mpg (miles per gallon) on the highway. At that rate, how much gasoline does it take to go 800 miles?

37) Given that the ratio of dogs to cats in a certain town is 2 to 7. How many cats are there if there are 280 dogs?

38) The ratio of a rectangle's base to its height is 1.6:1. Find the height if the base is 32cm.

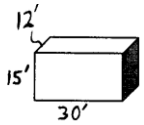
39) Calculate the area.

a) 

b) 

c) 

40) Calculate the volume of each solid.

a) A box. 

b) A cylinder.