

Name: _____

Heatherwood Mathletes
Preliminary Assessment
September 27, 2006

A. Mixed Addition and Subtraction (2 points each)

$$\begin{array}{r} 22 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ - 21 \\ \hline \end{array}$$

$$\begin{array}{r} 78 \\ + 44 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ - 48 \\ \hline \end{array}$$

Addition/Subtraction Word Problem (4 points)

Thirty-two penguins were sitting on a cliff. Eleven dived into the water. How many were left on the cliff?

B. Multiplication (3 points each)

$$\begin{array}{r} 7 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ \times 18 \\ \hline \end{array}$$

C. Division (express fractions in simplest terms) (3 points each)

$$9/3 =$$

$$49/7 =$$

$$43/7 =$$

$$66/8 =$$

Multiplication/Division Word Problem (4 points)

Alice and Beth picked some apples. Alice picked one-third as many as Beth. Beth picked 15. How many apples did Alice pick?

D. Adding and Subtracting Fractions (3 points each)

$$\frac{1}{3} + \frac{1}{3} =$$

$$\frac{1}{3} - \frac{1}{6} =$$

$$\frac{3}{7} + \frac{2}{3} =$$

$$\frac{2}{3} - \frac{5}{12} =$$

E. Multiplying and Dividing Fractions (3 points each)

$$\frac{1}{2} \times \frac{1}{2} =$$

$$\frac{3}{7} \times \frac{2}{3} =$$

$$1\frac{1}{2} \times \frac{1}{3} =$$

$$\frac{2/5}{3/2} =$$

Fraction Word Problem (4 points)

Matthew's class has 20 students. Half the students study math, a quarter study science, and the rest read. How many students read?

F. Simplify

(a) $(-3) \times (-4) \times (-5) =$

(b) $15 \times (-2) + (-11) \times 5 =$

G. Solve for x (4 points each)

$x + 7 = 10$

$5x + 10 = 30$

$5x - 10 = 11$

H. Algebraic Word Problem (5 points)

(a) Write an algebraic equation for the following problem. Don't solve it. What is the number that when you multiply it by 5 and add 5 you get 25?

(b) Now solve the previous problem. What is the number that when you multiply it by 5 and add 5 you get 25?