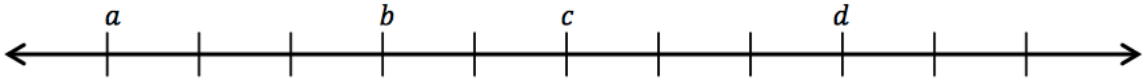
Unit 3 Practice Test (90 pts) Name: _____

Block: _____ (2 pts)

If zero lies at c, give the set of possible values for *a*, *b*, and *d*. (3 pts)



a = _____ b = _____ d = _____

Order the following numbers from least to greatest. (2 pts)

$19.45,\ -19\frac{3}{7},\ 19\frac{3}{5},\ -19.\overline{4}$

Solve the following expressions: (3 pts each)

$5^2 + 4 \bullet (-9 + 7) - 8$

$2\frac{1}{5} + 3\frac{5}{7}$

$10 \div (-7 + 5) + 3 \bullet |-9|$

$4\frac{1}{4} - 1\frac{4}{7}$

$2\frac{3}{4} \bullet 1\frac{1}{3}$

$2\frac{5}{7} \div \frac{2}{5}$

Use factor trees to solve and find the Greatest Common Factor. (8 pts)

Connor and Grace are having a party and want to make treat bags for their guests. They want each bag to be identical with nothing left over. Connor has 27 Hot Wheels, 30 sugar cookies, and Grace bought 15 Kit Kats to put in the bags. What is the greatest number of treat bags they can make and how many of each item will be in each treat bag?

Number of treat bags: _____

Number of Hot Wheels: _____

Number of Kit Kats: _____

Number of Sugar Cookies: _____

Use multiples to find your solution. (7 pts)

All the students at Baird Middle School are going to Explorer's music concert. As a special treat every third student will receive a $5 Starbucks gift card. Then the principal decided that every fifth student would receive a free download of their album. An hour before the concert started, Mr. Wong talked the band into giving every tenth student a backstage pass.

Which student will be the first to receive a gift card,
free download of the album, and a backstage pass? _____

If there are 517 students at Baird Middle School, how many of each item will they have to give away?

Starbucks Gift Card: _____

Album Download: _____

Backstage Pass: _____

Macy bought eight and four–fifths pounds of rock candy from the candy store on the corner. She decided to share five and seven–eighths pounds with her friends at school the next day. How much rock candy does she have left? (3 pts)

Box which expressions are **not equal** to 8.32? Show all work. (4 pts)

a. 4.46 + 3.96 b. 3.16 + 5.16 c. 4.16 • 2

c. .01 + 8.21 d. 10.43 – 2.11 e. 10.01 – 1.69

Box **all numbers** from the list below that are greater than 5 and less than 5.35. (2 pts)

a. 27/5 b. 49/10 c. 5.329 d. 5.5

The following are Bobby's quiz scores his first quarter: (5 pts)
84, 76, 68, 82, 96, 80, 74.

Find the mean, median, mode, and range.

Mean= _____ Median= _____

Range= _____ Mode= _____

Mr. Wong is driving his van from Fresno to Las Vegas and it takes him 4 hours. His wife changes the radio station every three-fifths of an hour. Draw an illustration and solve mathematically to show how many times Mrs. Wong changed the radio station during the trip. (6 pts)

Fill in the expressions in the appropriate places. Solve each expression.
You may only use each expression once. (6 pts)

a. | 3 – 5 | b. 7 – 2 c. 4 – 9 d. 2 - -3

e. -13 + -5 f. | 2 + - 8 | g. -2 + 5 h. | - 3 + -4 |

_____ > _____

_____ < _____

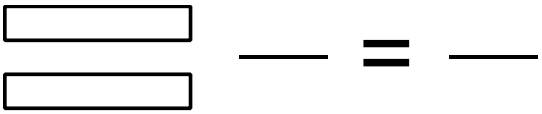
_____ = _____

Express each ratio in original form and reduce your ratios if possible. (4 pts)

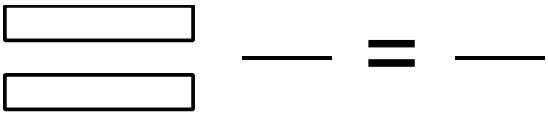
1) Stars to all shapes: _____

2) Spades to squares: _____

Sara liked 26 of the movies she saw last year. If she saw 40 movies, what percent of the movies did she like? Use a proportion to solve. (4 pts)

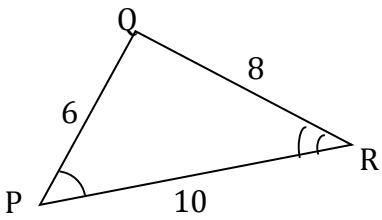


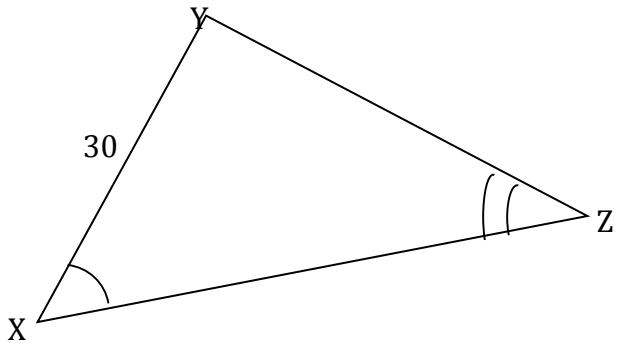
The Bairdtown football team outscored its opponents 7:4 last season. If their opponents scored 26 points, about how many points did Bairdtown score? (4 pts)



A picture is 9 inches wide by 14 inches tall. If the width of poster is scaled to 15 inches, how tall should the poster be, round to the nearest tenth.
Draw a picture representing the problem. (4 pts)

∆PQR is similar to ∆XYZ.





What is the perimeter of ∆XYZ? (4 pts)

Caden went shopping for a pet snake. He found a Sand Boa for $69 and a tank to hold the snake for $99. The sales tax is 11%, he gave the cashier $200, how much money did the cashier give him back? (4 pts)