

Name: _____ Period: _____

Week 31 Homework Packet – 7th Grade Math Honors

ASSIGNMENT DUE TUESDAY, MARCH 28, 2017

Unit 4, Chapter 8 - Equations and Inequalities

For each problem below, simplify the expression, then solve the equation. Show all work!

1) $(3x + 7) - (2x - 4) = 8$

2) $2(3x - 5) - 3(4x + 2) = 8$

3) $18 = -3(m - 6)$

4) $\frac{1}{3}(6x + 24) = 14$

5) $1.2x + 2(x - 4) = 8$

6) $\frac{3}{4}(6m - 12) = 15$

SCORE
/4

WEEK SCORE
/12

Stamp

For each word problem below, write an equation to model the scenario. Then, solve the equation.

7) Each day, Xiaoping drives the same distance to and from work. He also goes to the gym after work, which adds another 3 miles of driving per day. In a five-day work week, if he only drives to and from work and the gym, he will drive 35 miles. What is the round-trip distance to Xiaopeng's workplace?

8) A jumbo aircraft has 30 rows, of which 24 are in economy class and the rest are in first-class. Each row in the economy class has nine seats. If the plane has a total of 396 seats, how many seats are there in each row of first-class?

9) Tammy has saved \$85 per month for the last seven months and wants to continue saving until she can get a \$1,105 computer. How many more months will she need to save to be able to buy the computer?

10) Denisha and four of her friends all have discount passes to the local movie theater. The passes are good for \$2.95 off of admission per person. If they spend a total of \$47.75 on admission, what is the regular price per ticket?

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7th Grade Math Honors

SCORE

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Stamp

ASSIGNMENT DUE WED/THU, MARCH 29/30, 2017

Unit 4, Chapter 8 - Equations and Inequalities

For each problem below, simplify the expression, then solve the equation. Show all work!

Skills Review

Evaluate the following. Show all work.

1) $3m - 5 = 2m - 8 - 1$

7) $|3 - 7|$

2) $-10 - 2p = 2p + 6$

8) $|3| - |7|$

3) $7(b - 5) = 3b - 39$

9) $\frac{3}{4} + \frac{2}{3}$

4) $8v + 7 = 7 - v$

10) $\frac{2}{9} \times \frac{3}{8}$

5) $a + 8 = -1 + 3a - 5$

11) $3.4 \times 10^{25} + 2 \times 10^{24}$

6) $21 + n = -5n + 3(2 + n)$

12) $1.2 \times 10^{11} - 8 \times 10^{10}$

13) $(4 \times 10^9) \times (5 \times 10^{17})$

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7th Grade Math Honors

ASSIGNMENT DUE FRIDAY, MARCH 31, 2017

Unit 4, Chapter 8 - Equations and Inequalities

For each problem below, simplify the expression, then solve the equation. Show all work!

1) $-5p - 8(1 + 2p) = -8 + p$

2) $4(1 + 2x) = 4 + 8x$

3) $8(r + 5) = 8r + 45$

4) $5 - 2(1 - 3x) = 6x + 3$

5) $10 + 5x = 2(4x - 6) - 2$

6) $20 + 8v = -4(1 - 5v)$

SCORE
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Stamp

For each word problem below, write an equation to model the scenario. Then, solve the equation.

7) Denzel is comparing web sites for downloading music. One site charges a \$5 membership fee plus \$0.50 per song downloaded. The other has no membership fee but charges one dollar per song. How many songs would Denzel have to download to spend the same amount at both web sites?

8) Container A and container B have leaks. Container A has 800 ml of water, and is leaking 6 ml per minute. Container B has 1000 ml, and is leaking 10 ml per minute. How many minutes will it take for the two containers to have the same amount of water?

9) UPS charges \$7 for the first pound, and \$0.20 for each additional pound. FedEx charges \$5 for the first pound and \$0.30 for each additional pound. How many pounds will it take for UPS and FedEx to cost the same?

10) Bill weighs 120 pounds and is gaining ten pounds each month. Phil weighs 150 pounds and is gaining 4 pounds each month. How many months will it take for Bill to weigh the same as Phil?