Algebra 1
Unit 2 Solving Linear Equations
2.1a – Solving One Step Equations

Mathematician: _____

Period:_____

LEVEL: EMERGING

SUBTRACTION & ADDITION Directions: Solve the equation. Check your solution.

1) $x + 5 = 8$

2) $11 = f + 6$

3) $6 = 9 + h$

4) $y - 4 = 3$

5) $14 = k - 3$

6) $-2 = n - 6$

MULTIPLICATION & DIVISION Directions: Solve the equation. Check Your Solution

7) $5g = 20$

8) $48 = 8c$

9) $15 = -h$

10) $\frac{y}{3} = 5$

11) $8 = \frac{x}{6}$

12) $-11 = \frac{z}{-2}$

LEVEL: PROFICIENT

ALL OPERATIONS Directions: Solve the equation. Check Your Solution

13) $\frac{3}{4} = \frac{1}{8} + v$

14) $-0.12 = \frac{y}{-0.5}$

15) $\frac{1}{3}c = 32$

16) $\frac{3}{2}k = 18$

17) $-\frac{2}{7}v = 16$

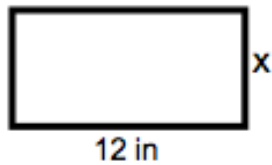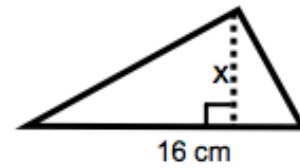18) $\frac{1}{3}y = \frac{1}{5}$

The rectangle or triangle has the given area A. **Write** and **solve an equation** to find the value of the missing

19) A = $54 in^2$

12 in

x

20) A = $72\ cm^2$

x

16 cm

Find the value of b using the given information. Show your work for evidence.

21) $4a = 6$ and $b = a - 2$

22) $a - 6.7 = 3.1$ and $b = 5a$

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23) The van used to transport patients to and from a rehabilitation facility is equipped with a wheel chair lift. The maximum lifting capacity for the lift is 300 pounds. The wheelchairs used by the facility weigh 55 pounds each. What is the maximum weight of a wheelchair occupant who can use the lift?

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24) An American flag has a length that is 1.9 times its width. What is the area of a flag that has a length of 9.5 feet?

Answers:
19) $54 = 12x; x = 4.5in$ 20) $72 = \frac{1}{2}(16)x; x = 9cm$
21) $b = -0.5$ 22) $b = 49$
23) $245lb$ 24) $47.5 ft^2$