Algebra Review \#3 SHOW HOW YOU SOLVED EACH PROBLEM

1. Solve each proportion
a. $\frac{100}{14}=\frac{x}{56}$
b. $\frac{7}{x}=\frac{18}{21}$
C. $\frac{x}{9}=\frac{17}{81}$
2. Simplify each expression

| $-4(50)$ | $\mathrm{t}-10 \mathrm{~s}$ <br> if $\mathrm{t}=-55$ |
| :--- | :--- |
|  |  |
| $(5)^{2} \cdot(9-17) \div(-10)^{2}$ |  |

3. Write an expression for each of the following.

| Three times as many <br> absences (a) plus 5 | 5 tablespoons every <br> day (d) plus two |
| :--- | :--- |
| 7 times the sum of <br> bottles (b) added to <br> one | $\$ 20$ less than $\$ 10$ for <br> each (x) |

4. Simplify by using the distributive property and combining like terms:

| $8(2 c+5)$ | $-2(5 c-3)$ |
| :---: | :---: |
|  |  |
| $10+2(4 y+3)$ | $3(2 r+5)-8(2-r)$ |
|  |  |
|  |  |

5. Solve the equation:

$$
6 x+10 x=80
$$

6. Solve each equation:

| $x+15=-2$ | $-5 x=60$ |
| :---: | :---: |
|  |  |
| $-20=4 x$ | $\frac{x}{3}=-11$ |

7. Simplify the radical expression:
$\sqrt{30}$
8. Simplify the radical expression:
$\sqrt{280}$
9. Simplify the radical expression:
$\sqrt{18}$
10. Simplify the radical expression:
$\sqrt{125}$
