

## Day 4 - Simplifying Radicals - Practice

1. Simplify the following radicals (Pick 4):

a.  $\sqrt{45}$

$$\sqrt{3 \cdot 3 \cdot 5}$$

$$3\sqrt{5}$$

b.  $\sqrt{125}$

$$\sqrt{5 \cdot 5 \cdot 5}$$

$$5\sqrt{5}$$

c.  $\sqrt{80}$

$$\sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 5}$$

$$2 \cdot 2 \sqrt{5}$$

$$4\sqrt{5}$$

d.  $\sqrt{18}$

$$\sqrt{2 \cdot 3 \cdot 3}$$

$$3\sqrt{2}$$

e.  $\sqrt{54}$

$$\sqrt{2 \cdot 3 \cdot 3 \cdot 3}$$

$$3\sqrt{6}$$

f.  $\sqrt{44}$

$$\sqrt{2 \cdot 2 \cdot 11}$$

$$2\sqrt{11}$$

2. Simplify the following radicals (Pick 4):

a.  $4\sqrt{36}$

$$4 \cdot 6$$

$$24$$

b.  $-7\sqrt{20}$

$$-7\sqrt{2 \cdot 2 \cdot 5}$$

$$-7 \cdot 2\sqrt{5}$$

$$-14\sqrt{5}$$

c.  $6\sqrt{75}$

$$6\sqrt{3 \cdot 5 \cdot 5}$$

$$6 \cdot 5\sqrt{3}$$

$$30\sqrt{3}$$

d.  $8\sqrt{24}$

$$8\sqrt{2 \cdot 2 \cdot 2 \cdot 3}$$

$$8 \cdot 2\sqrt{6}$$

$$16\sqrt{6}$$

e.  $3\sqrt{50}$

$$3\sqrt{2 \cdot 5 \cdot 5}$$

$$3 \cdot 5\sqrt{2}$$

$$15\sqrt{2}$$

f.  $-5\sqrt{54}$

$$-5\sqrt{2 \cdot 3 \cdot 3 \cdot 3}$$

$$-5 \cdot 3\sqrt{6}$$

$$-15\sqrt{6}$$