MAT 0024 Sample Test 5 Name _____

**Evaluate the following radical expressions**

1) $\sqrt{81}$

2) $\sqrt[3]{8}$

3) $\sqrt{-16}$

4) $\sqrt[3]{-27}$

5) $\sqrt[3]{\frac{1}{27}}$

6) $\sqrt[4]{81}$

7) $-\sqrt{4}$

8) $5\sqrt{36}$

**Simplify the following radical expressions completely**

9) $\sqrt{12}$

10) $5\sqrt{18}$

11) $\sqrt{48}$

12) $\sqrt{\frac{50}{x^2}}$

13) $\sqrt{24x^2y^2}$

14) $\sqrt{20x^2y}$

**ADD or SUBTRACT as indicated. SIMPLIFY your answers Completely**

15) $5\sqrt{2} + 8\sqrt{2}$

16) $6\sqrt{3} - \sqrt{3} + 7\sqrt{3}$

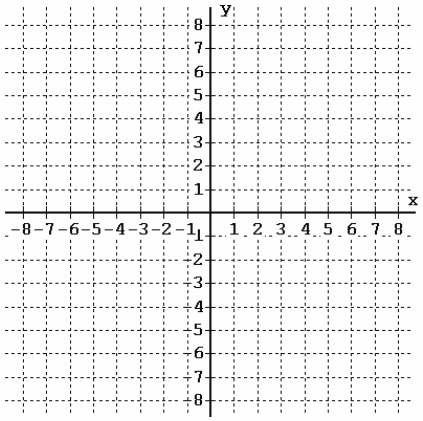
17) $6\sqrt{5} + 2\sqrt{7} + 3\sqrt{5}$

18) $\sqrt{12} + \sqrt{27}$

19) $\sqrt{2} + \sqrt{24} - \sqrt{18}$

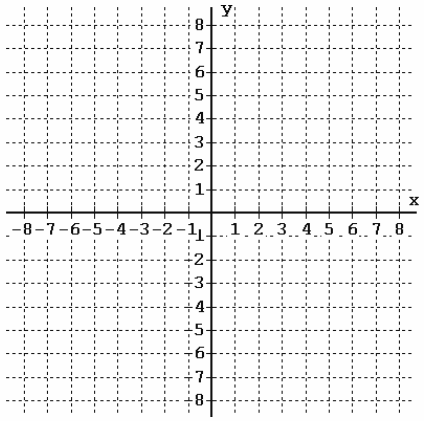
20) $5\sqrt{27} - 3\sqrt{12}$

Graph the following lines



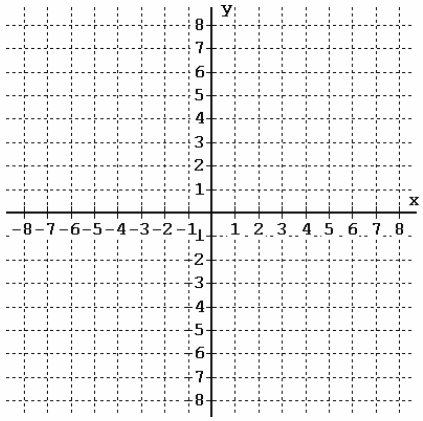
21) $y = x + 2$

| $x$ | $y$ |
|---|---|
| | |



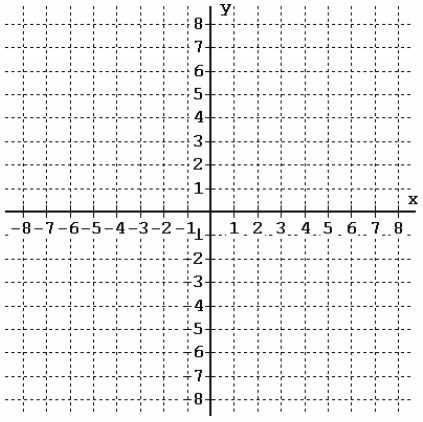
22) $y = 3x - 1$

| $x$ | $y$ |
|---|---|
| | |



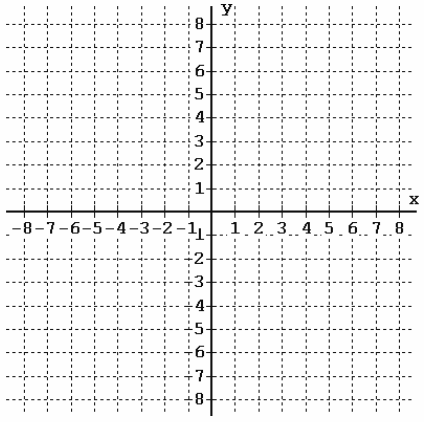
23) $x + 3y = 6$

| $x$ | $y$ |
|---|---|
| | |



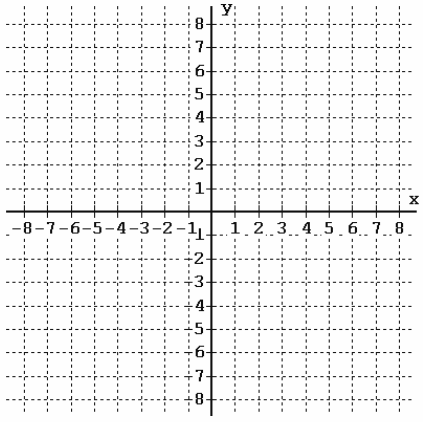
24) $y = 3$

| $x$ | $y$ |
|---|---|
| | |



25) $2x - 3y = 12$

| $x$ | $y$ |
|---|---|
| | |



26) $x = 4$

| $x$ | $y$ |
|---|---|
| | |

27) Find the x-intercept of $y = 3x - 4$

28) Find the y-intercept of $x - 2y = 5$