Trigonometry	**Name:** _____
Study Guide 19	**Class:** _____
Due Date: _____	**Score:** _____

No Work $\Leftrightarrow$ No Points

Use Pencil Only $\Leftrightarrow$ Be Neat & Organized

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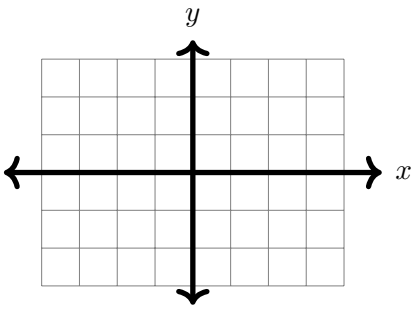
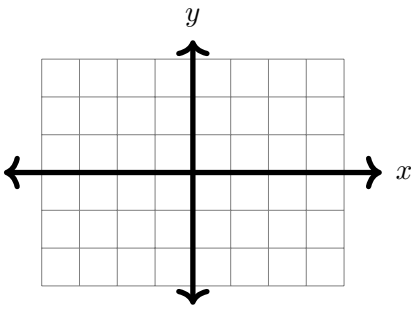
1. Given $\sin A = \frac{3}{5}, \cos B = -\frac{5}{13}$, A is in quadrant I, and B is in quadrant II.

(a) (3 points) Draw two different angles representing information above and clearly label them.





(b) (2 points) Find the exact value for $\sin 2A$.

(b) _____

(c) (2 points) Find the exact value for $\cos 2B$.

(c) _____

(d) (2 points) Find the exact value for $\sin(A + B)$.

(d) _____

(e) (2 points) Find the exact value for $\cos(A - B)$**.**

(e) _____

(f) (3 points) Find the exact value for $\tan(A + B)$**.**

(f) _____

(g) (3 points) Find the exact value for $\tan \dfrac{B}{2}$**.**

(g) _____

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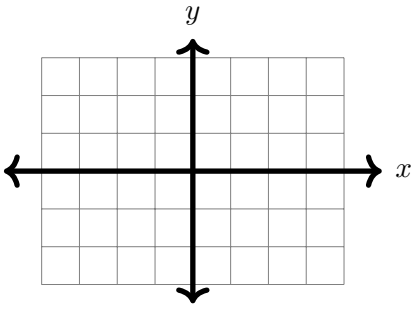
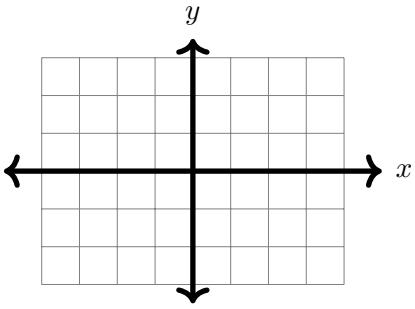
2. Given $\sin A = \dfrac{3}{7}, \cos B = -\dfrac{2}{5}, A$ **is in quadrant II, and** B **is in quadrant III.**

(a) (3 points) Draw two different angles representing information above and clearly label them.





(b) (2 points) Find the exact value for $\cos(A + B)$**.**

(b) _____

(c) (3 points) Find the exact value for $\sin\frac{A}{2}$.

(c) _____

(d) (3 points) Find the exact value for $\sin\frac{B}{2}$.

(d) _____

(e) (3 points) Find the exact value for $\tan 2A$.

(e) _____

(f) (3 points) Find the exact value for $\cot 2B$.

(f) _____

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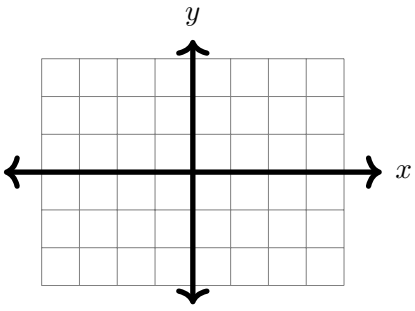
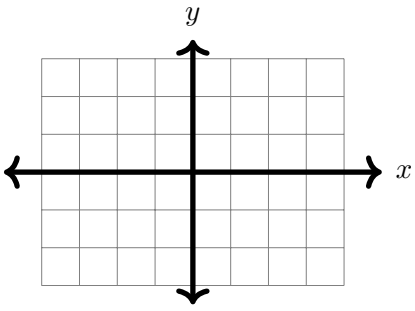
3. Given $\tan A = \frac{3}{4}, \cot B = -\frac{12}{5}$, A is in quadrant III, and B is in quadrant IV.

(a) (3 points) Draw two different angles representing information above and clearly label them.





(b) (2 points) Find the exact value for $\tan\frac{A}{2}$.

(b) _____

(c) (3 points) Find the exact value for $\cot\frac{B}{2}$.

(c) _____

(d) (3 points) Find the exact value for $\sec(A+B)$.

(d) _____

(e) (3 points) Find the exact value for $\csc(A-B)$.

(e) _____

(f) (2 points) Find the exact value for $\tan\left(\frac{\pi}{2}-\frac{B}{2}\right)$.

(f) _____