Name : _____ Score : _____

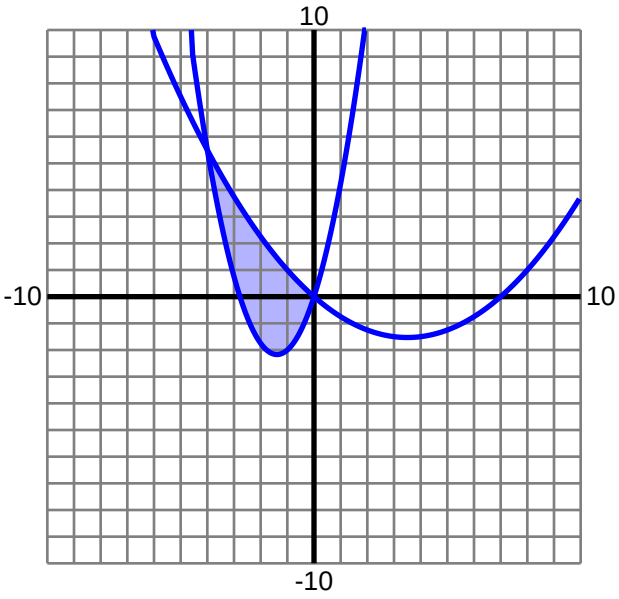
Teacher : _____ Date : _____

Area Under a Curve

Find the shaded area enclosed by the curves. Round to two decimals if necessary.

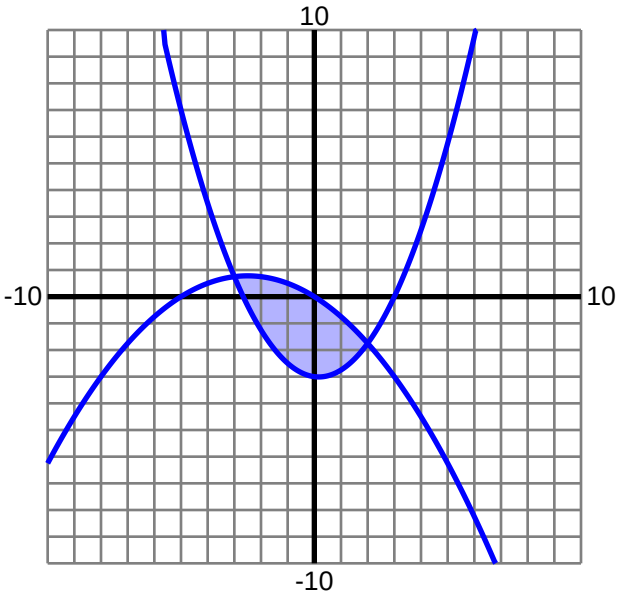
1) $y = \frac{1}{8}x^2 - \frac{7}{8}x$

$y = \frac{9}{8}x^2 + \frac{25}{8}x$



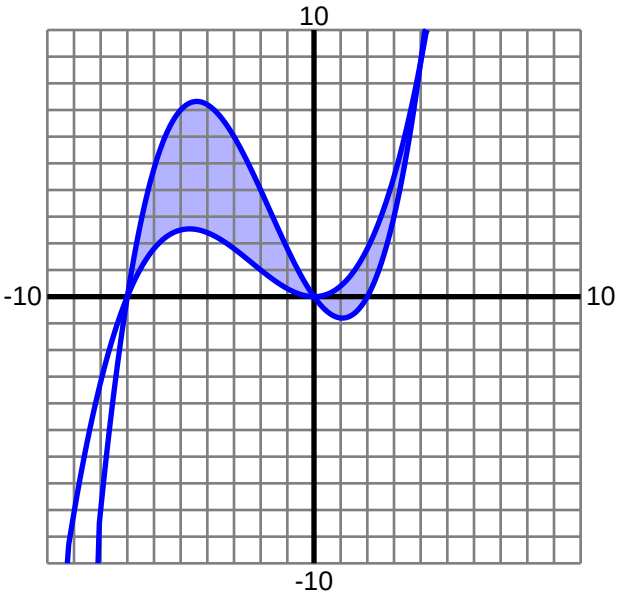
2) $y = -\frac{1}{8}x^2 - \frac{5}{8}x$

$y = \frac{3}{8}x^2 - \frac{1}{8}x - 3$



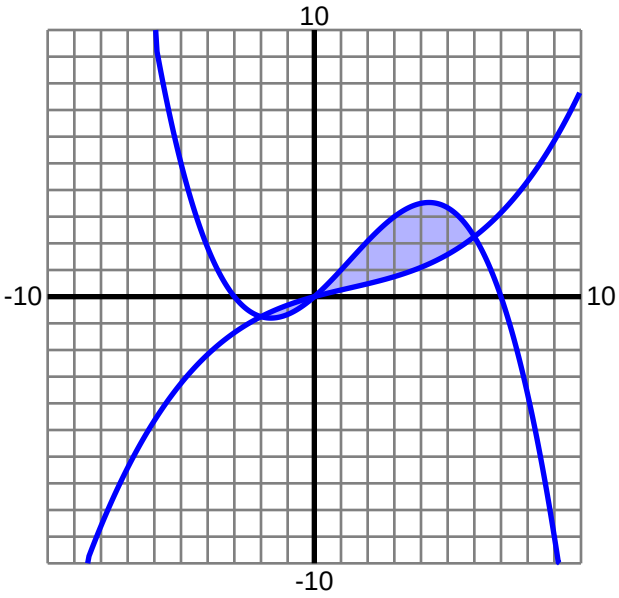
3) $y = \frac{1}{20}x^3 + \frac{7}{20}x^2$

$y = \frac{1}{10}x^3 + \frac{1}{2}x^2 - \frac{7}{5}x$



4) $y = -\frac{1}{24}x^3 + \frac{1}{6}x^2 + \frac{7}{8}x$

$y = \frac{1}{120}x^3 - \frac{1}{30}x^2 + \frac{11}{40}x$



Name : _____ Score : _____

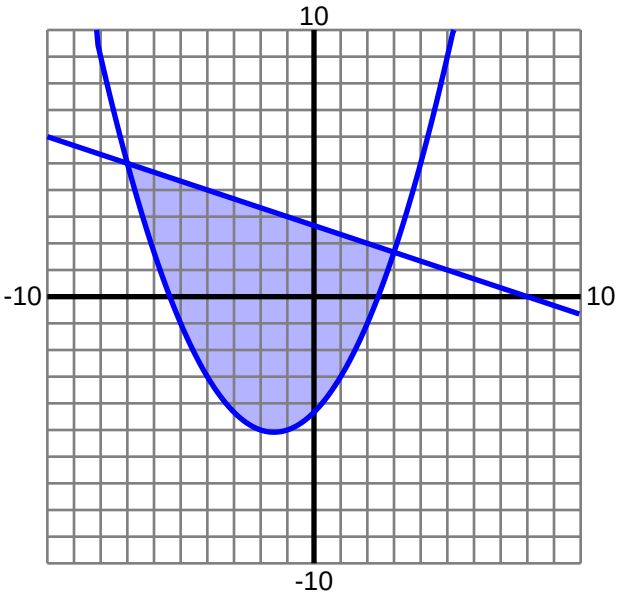
Teacher : _____ Date : _____

Area Under a Curve

Find the shaded area enclosed by the curves. Round to two decimals if necessary.

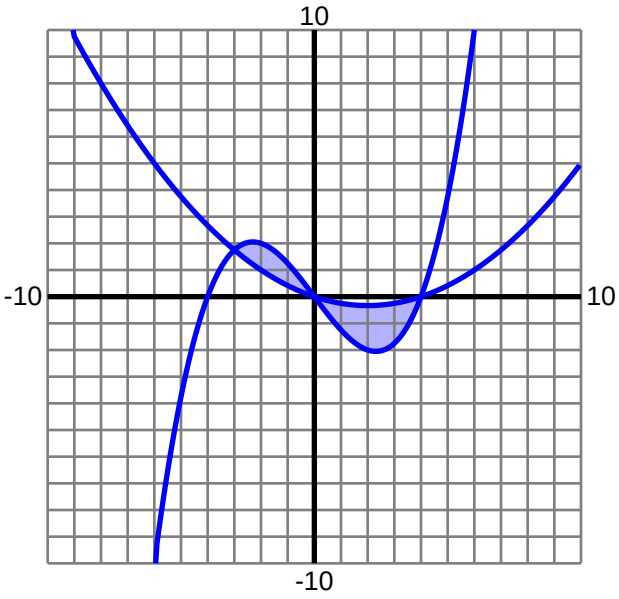
5) $y = -\frac{1}{3}x + \frac{8}{3}$

$y = \frac{1}{3}x^2 + x - \frac{13}{3}$



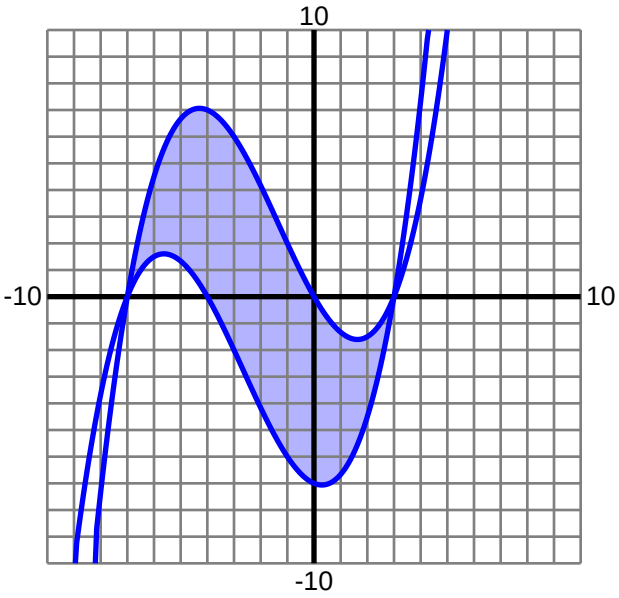
6) $y = \frac{1}{12}x^3 - \frac{4}{3}x$

$y = \frac{1}{12}x^2 - \frac{1}{3}x$



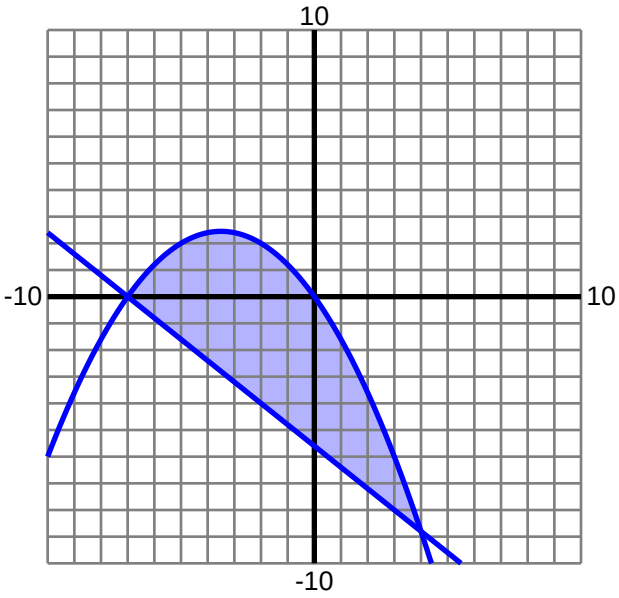
7) $y = \frac{1}{12}x^3 + \frac{1}{3}x^2 - \frac{7}{4}x$

$y = \frac{1}{12}x^3 + \frac{2}{3}x^2 - \frac{5}{12}x - 7$



8) $y = -\frac{1}{5}x^2 - \frac{7}{5}x$

$y = -\frac{4}{5}x - \frac{28}{5}$



Name : _____ Score : _____

Teacher : _____ Date : _____

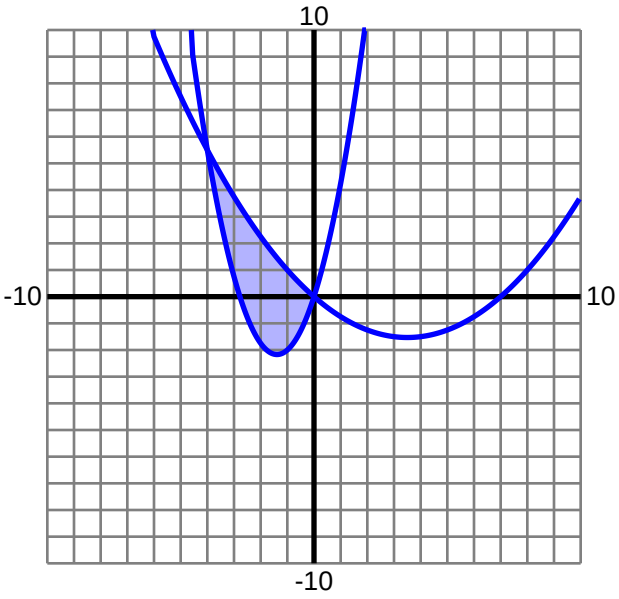
Area Under a Curve

Find the shaded area enclosed by the curves. Round to two decimals if necessary.

1) $y = \frac{1}{8}x^2 - \frac{7}{8}x$

$y = \frac{9}{8}x^2 + \frac{25}{8}x$

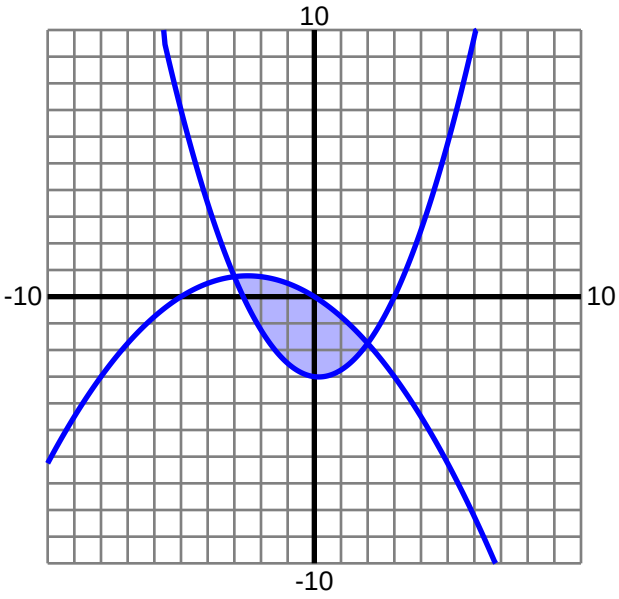
Area: 10.67



2) $y = -\frac{1}{8}x^2 - \frac{5}{8}x$

$y = \frac{3}{8}x^2 - \frac{1}{8}x - 3$

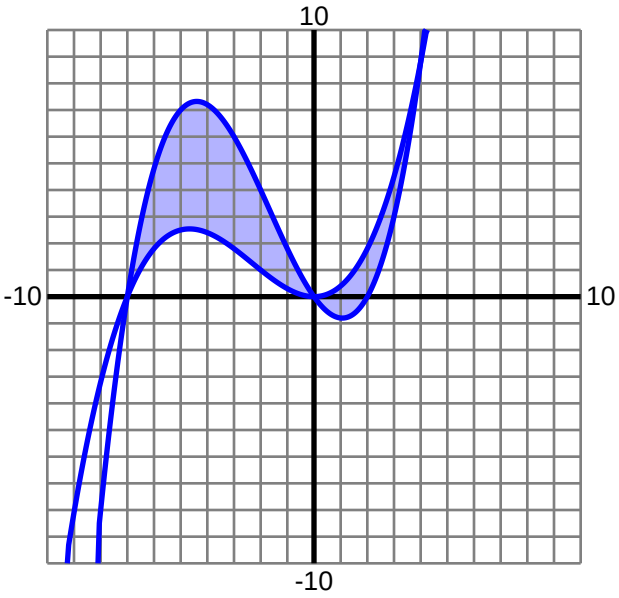
Area: 10.42



3) $y = \frac{1}{20}x^3 + \frac{7}{20}x^2$

$y = \frac{1}{10}x^3 + \frac{1}{2}x^2 - \frac{7}{5}x$

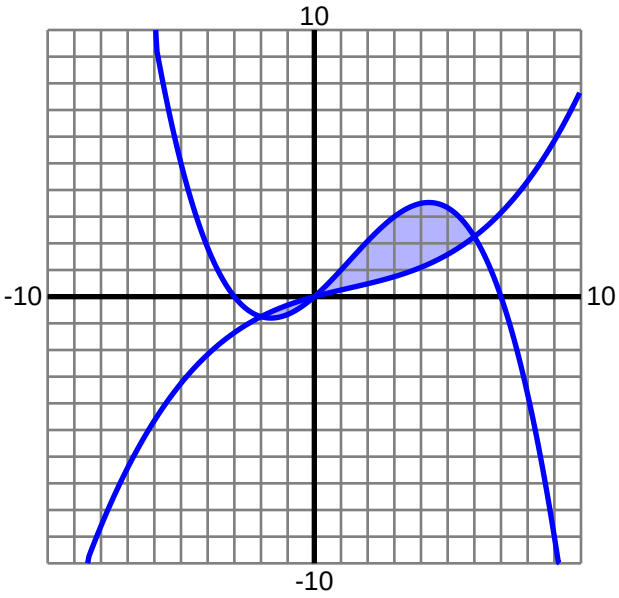
Area: 26.24



4) $y = -\frac{1}{24}x^3 + \frac{1}{6}x^2 + \frac{7}{8}x$

$y = \frac{1}{120}x^3 - \frac{1}{30}x^2 + \frac{11}{40}x$

Area: 9.47



Name : _____ Score : _____

Teacher : _____ Date : _____

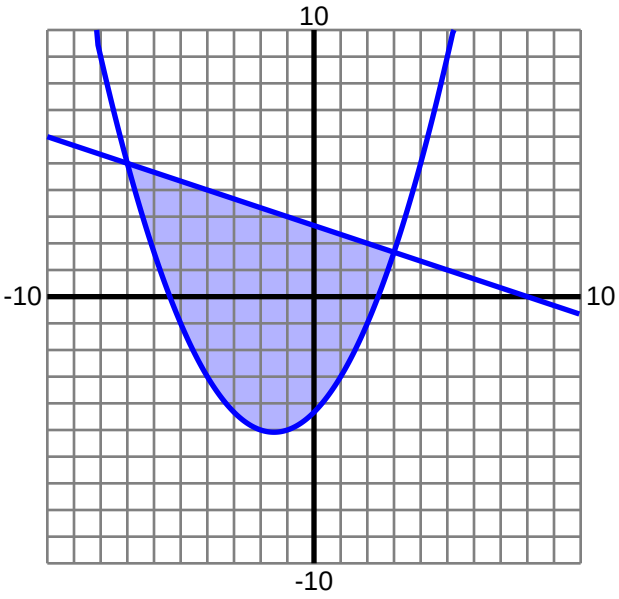
Area Under a Curve

Find the shaded area enclosed by the curves. Round to two decimals if necessary.

5) $y = -\frac{1}{3}x + \frac{8}{3}$

$y = \frac{1}{3}x^2 + x - \frac{13}{3}$

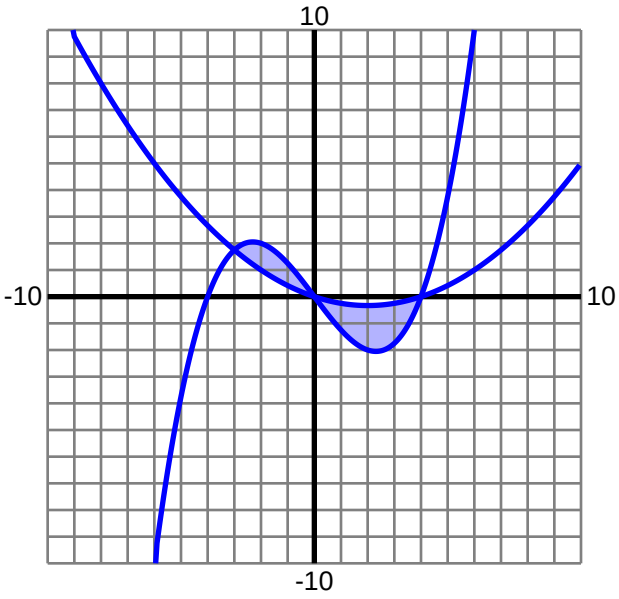
Area: 55.56



6) $y = \frac{1}{12}x^3 - \frac{4}{3}x$

$y = \frac{1}{12}x^2 - \frac{1}{3}x$

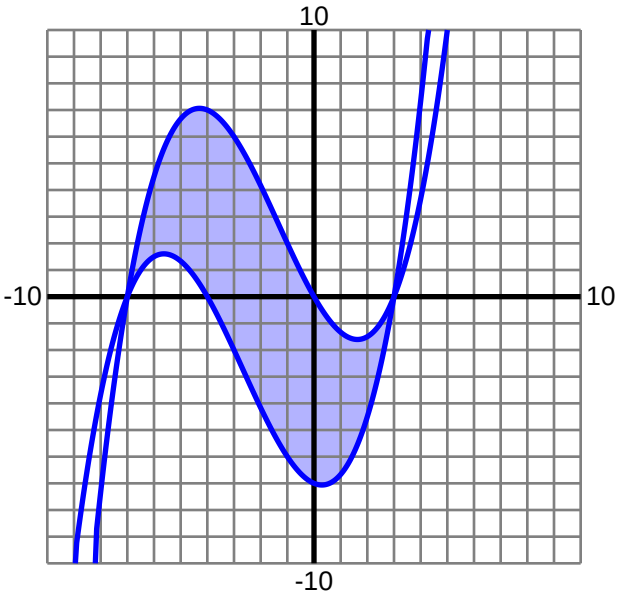
Area: 6.51



7) $y = \frac{1}{12}x^3 + \frac{1}{3}x^2 - \frac{7}{4}x$

$y = \frac{1}{12}x^3 + \frac{2}{3}x^2 - \frac{5}{12}x - 7$

Area: 55.56



8) $y = -\frac{1}{5}x^2 - \frac{7}{5}x$

$y = -\frac{4}{5}x - \frac{28}{5}$

Area: 44.37