Independent Practice
Find the area of the following shapes


Area on the Coordinate Plane


Find the area of a circle whose diameter endpoints are located at $A(-2,-3)$ and $B(4,3)$.

$$
\begin{gathered}
r=\frac{\sqrt{72}}{2} \\
A=56.59
\end{gathered}
$$



Figure $D E F G$ has vertices $D(-3,1), E(1,3), F(2,1)$ and $G(-2,-1)$. Find the area of DEFG.

$$
\begin{array}{ll}
D 6=\sqrt{5} & A=10 \\
D E=\sqrt{20} &
\end{array}
$$



Square MATH has points $M(1,-2)$ and $A(3,6)$.
Find the area of square MATH.

$$
\begin{gathered}
M A=\sqrt{68} \\
A=68
\end{gathered}
$$


$\Delta \mathrm{PQR}$ has coordinates $P(1,3), Q(5,6)$ and $R(4,-1)$. Find the area of $\triangle P Q R$.

$$
\begin{aligned}
& P Q=5 \\
& R R=5
\end{aligned}
$$

$$
A=12.5
$$

