Geometric Reasoning


Vertically Opposite Angles are equal

$$
\begin{aligned}
& x=y \\
& p=q
\end{aligned}
$$

Key Point
Be able to find the interior angle of any regular polygon

For $n$-sided regular polygon

$$
\text { exterior angle }=\frac{360^{\circ}}{n}
$$

interior angle $=180^{\circ}-\frac{360^{\circ}}{n}$

Geometry - Parallel Lines

$P Q$ is parallel to $R S$.
$O S Q$ and $O R P$ are straight lines.
(a) (i) Write down the value of $x$. $\qquad$

$$
x=
$$

(ii) Give a reason for your answer.
corresponding angles
are equal
(b) Work out the value of $y$.

$$
\begin{aligned}
& \angle R S O=75^{\circ} \quad(\text { vert opp } \angle s) \\
& \angle S R_{D}=70^{\circ}(\text { adj } \angle s \text { on a str line) } \\
& y=(180-75-70)(\angle \text { sum of } \Delta) \\
& y=35^{\circ} \\
& y=\ldots . . . . . . . . . . . . . . . . . . . ~
\end{aligned}
$$

