Maths

## Solving equations with unknown on both sides

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## Solving equations with unknown on both sides

1. Solve the equations.
a) $3 v-5=v+1$
b) $4 w+7=7 w-8$
c) $4 x-3=6 x-8$
d) $9 y+1=15 y-1$
2. Form and solve an equation for $p$.

c) $2 g+5=4 g+12$
d) $5 h-3=10 h-1$
3. Solve the equations.
$\begin{array}{ll}\text { a) } 4 e+7=e-2 & \text { b) } 3 f-8=5 f+10\end{array}$
4. Form and solve an equation for $n$.


## Solving equations with unknown on both sides

5. Solve the equations.
a) $4(w-9)=w-6$
b) $2(x+7)=3(x+5)$
c) $5(2 y+1)=4(4 y-4)$
6. Form and solve an equation for $z$.

7. This pair of regular polygons have the same perimeter.


Form and solve an equation to find $v$.

Answers

## Solving equations with unknown on both sides

1. Solve the equations.
a) $3 v-5=v+1$
b) $4 w+7=7 w-8$

$$
v=3
$$

$$
w=5
$$

c) $4 x-3=6 x-8$
d) $9 y+1=15 y-1$

$$
y=\frac{1}{3}
$$

$x=2.5$
2. Form and solve an equation for $p$

3. Solve the equations.
a) $4 e+7=e-2$
b) $3 f-8=5 f+10$
$e=-3$

$$
f=-9
$$

c) $2 \mathrm{~g}+5=4 \mathrm{~g}+12$ d) $5 \mathrm{~h}-3=10 \mathrm{~h}-1$

$$
g=-3.5
$$

$$
d=-0.4
$$

4. Write and solve an equation for $n$.


## Solving equations with unknown on both sides

5. Solve the equations.
a) $4(w-9)=w-6 \quad w=10$
b) $2(x+7)=3(x+5) \quad x=-1$
c) $5(2 y+1)=4(4 y-4) y=3.5$
6. Write and solve an equation for $z$.

7. This pair of regular polygons have the same perimeter.


Form and solve an equation to find $v$.

