## Answer 41

41. If $-3 /(a-3)=3 /(a+2)$, then $a=$ ?

$$
\frac{-3}{(a-3)}=\frac{3}{(a+2)}
$$

Cross multiply, but be sure to keep the parenthesis intact so the Distributive Property can be properly applied:

$$
\begin{aligned}
-3(a+2) & =3(a-3) \\
-3 a-6 & =3 a-9
\end{aligned}
$$

Then simplify by adding both 3 a and 9 to both sides

$$
\begin{aligned}
-6+9 & =3 a+3 a \\
3 & =6 a
\end{aligned}
$$

Therefore $\mathrm{a}=1 / 2$ so answer C .

