Name

Polynomial Inequalities - Two Factors with Multiplicity - Solution Set

1 Which set of values satisfies this inequality?

$$(x+3)^4x^3<0$$

A	$(-\infty,0)$	B	$(-3,0)$
C	$(-\infty,0)\cup(0,\infty)$	D	$(0,\infty)$

2 Which set of values satisfies this inequality?

$$(x-1)^2(x-3)<0$$

A	$(-\infty,3)\cup(3,\infty)$	B	$(3,\infty)$
C	$(-\infty,3)$	D	$(1,3)$

3 Which set of values satisfies this inequality?

$$(x+3)(x-2)^2>0$$

A	$(-\infty,-3)\cup(-3,\infty)$	B	$(-\infty,-3)$
C	$(-3,\infty)$	D	$(-\infty,-3)\cup(2,\infty)$

4 Which set of values satisfies this inequality?

$$(x+1)^3(x-2)^2<0$$

A	$(-1,\infty)$	B	$(-\infty,-1)$
C	$(-1,2)$	D	$(-\infty,-1)\cup(-1,\infty)$

5 Which set of values satisfies this inequality?

$$(x+1)^4(x-3)^3<0$$

A	$(-\infty,3)$	B	$(-1,3)$
C	$(3,\infty)$	D	$(-\infty,3)\cup(3,\infty)$

6 Which set of values satisfies this inequality?

$$(x+3)^4(x-3)>0$$

A	$(-\infty,3)$	B	$(-\infty,-3)\cup(3,\infty)$
C	$(3,\infty)$	D	$(-\infty,3)\cup(3,\infty)$

7 Which set of values satisfies this inequality?

$$(x-1)^3(x-2)^4<0$$

A	$(1,2)$	B	$(-\infty,1)$
C	$(-\infty,1)\cup(1,\infty)$	D	$(1,\infty)$

8 Which set of values satisfies this inequality?

$$(x+1)^5(x-3)^4<0$$

A	$(-\infty,-1)$	B	$(-1,3)$
C	$(-\infty,-1)\cup(-1,\infty)$	D	$(-1,\infty)$