



Questions?
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Ask Question



Write $5x + 3x^3 - 5x^2$ in the standard form.

Question

$$5x + 3x^3 - 5x^2$$

Answer

$$3x^3 - 5x^2 + 5x$$

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Questions?
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Write $5x^2 + 3x^1 - x^3$ in the standard form.

Question

$$5x^2 + 3x^1 - x^3$$

Answer

$$-x^3 + 5x^2 + 3x$$

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Questions?
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Write $4x + 5x + 3x^3 - x^2$ in the standard form.

Question

$$4x + 5x + 3x^3 - x^2$$

Answer

$$3x^3 - x^2 + 9x$$

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Write $-5x^2 + 10x^4$ in the standard form.

Question

$$-5x^2 + 10x^4$$

$$10x^4 - 5x^2$$

Answer

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Write $x + 5x^3$ in the standard form.

Question

$$x + 5x^3$$

$$5x^3 + x$$

Answer

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Problem 6 of 6

Write $5 + 3x^4 + 5x^2$ in the standard form.

Question

$$5 + 3x^4 + 5x^2$$

$$3x^4 + 5x^2 + 5$$

Answer



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Questions?
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Find the leading coefficient of
 $5x + 3x^3 - 5x^2$.

Question

$$5x + 3x^3 - 5x^2$$

$$3x^3 - 5x^2 + 5x$$

3

Answer

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Questions?
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Find the leading coefficient of
 $5x^2 + 3x^1 - x^3$.

Question

$$5x^2 + 3x^1 - x^3$$

$$-x^3 + 5x^2 + 3x$$

-1

Answer

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Find the leading coefficient of
 $4x + 5x + 3x^3 - x^2$.

Question

$$4x + 5x + 3x^3 - x^2$$

Answer

$$3x^3 - x^2 + 9x$$

3

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Questions?
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Find the leading coefficient of
 $-5x^2 + 10x^4$.

Question

$$-5x^2 + 10x^4$$

$$10x^4 - 5x^2$$

10

Answer

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Questions?
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Find the leading coefficient of $x + 5x^3$.

Question

$$x + 5x^3$$

$$5x^3 + x$$

$$\boxed{5}$$

Answer

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Questions?
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Find the leading coefficient of
 $5 + 3x^4 + 5x^2$.

Question

$$5 + 3x^4 + 5x^2$$

$$3x^4 + 5x^2 + 5$$

Answer

3

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Find the degree of
 $5x + 3x^3 - 5x^2$.

Question

$$5x + 3x^3 - 5x^2$$

$$3x^{\textcircled{3}} - 5x^2 + 5x$$

3

Answer

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Questions?
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Find the degree of
 $5x^2 + 3x^1 - x^3$.

Question

$$5x^2 + 3x^1 - x^3$$

$$-x^{\textcircled{3}} + 5x^2 + 3x$$

-1

Answer

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Find the degree of
 $4x + 5x + 3x^3 - x^2$.

Question

$$4x + 5x + 3x^3 - x^2$$

$$3x^3 - x^2 + 9x$$

3

Answer

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Find the degree of
 $-5x^2 + 10x^4$.

Question

$$-5x^2 + 10x^4$$

$$10x^4 - 5x^2$$

4

Answer

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Questions?
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Find the degree of
 $x + 5x^3$.

Question

$$x + 5x^3$$

$$5x^3 + x$$

3

Answer

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Ask Question



Find the degree of
 $5 + 3x^4 + 5x^2$.

Question

$$5 + 3x^4 + 5x^2$$

$$3x^4 + 5x^2 + 5$$

4

Answer

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Questions?
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Ask Question



Add $5x + 3x^3 - 5x^2$
and $5x^2 + 3x^1 - x^3$.

Question

$$\begin{array}{r}
 3x^3 - 5x^2 + 5x \\
 -x^3 + 5x^2 + 3x \\
 \hline
 2x^3 + 0 + 8x \\
 \boxed{2x^3 + 8x}
 \end{array}$$

Answer

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Questions?
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Ask Question



Add $5x^2 + 3x^1 - x^3$
and $4x + 5x + 3x^3 - x^2$

Question

$$-x^3 + 5x^2 + 3x$$

$$\underline{3x^3 - x^2 + 9x}$$

$$2x^3 + 4x^2 + 12x$$

$$\boxed{2x^3 + 4x^2 + 12x}$$

Answer

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Questions?
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Ask Question



Add $4x + 5x + 3x^3 - x^2$
and $-5x^2 + 10x^4$

Question

$$\begin{array}{r}
 3x^3 - x^2 + 9x \\
 10x^4 - 0 - 5x^2 \\
 \hline
 10x^4 + 3x^3 - 6x^2 + 9x \\
 \boxed{10x^4 + 3x^3 - 6x^2 + 9x}
 \end{array}$$

Answer

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Questions?
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Ask Question ▶

Add $-5x^2 + 10x^4$
and $5x^3 + x$

Question

$$10x^4 - 0 - 5x^2$$

$$\underline{0 + 5x^3 + 0 + x}$$

$$10x^4 + 5x^3 - 5x^2 + x$$

$$10x^4 + 5x^3 - 5x^2 + x$$

Answer

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Questions?
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Ask Question ▶

Add $5x^3 + x$
and $5 + 3x^4 + 5x^2$.

Question

$$\begin{array}{r}
 0 + 5x^3 + 0 + x \\
 3x^4 + 0 + 5x^2 + 0 + 5 \\
 \hline
 3x^4 + 5x^3 + 5x^2 + x + 5 \\
 \boxed{3x^4 + 5x^3 + 5x^2 + x + 5}
 \end{array}$$

Answer

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Questions?
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Ask Question



Add $5 + 3x^4 + 5x^2$
and $5x^2 + 3x^1 - x^3$

Question

$$\begin{array}{r}
 3x^4 + 0 + 5x^2 + 0 + 5 \\
 0 - x^3 + 5x^2 + 3x \\
 \hline
 3x^4 - x^3 + 10x^2 + 3x + 5 \\
 \boxed{3x^4 - x^3 + 10x^2 + 3x + 5}
 \end{array}$$

Answer

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Questions?
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Ask Question



Subtract $5x + 3x^3 - 5x^2$
from $5x^2 + 3x^1 - x^3$.

Question

$$\begin{array}{r} -3x^3 - 5x^2 + 5x \\ -x^3 + 5x^2 + 3x \\ \hline \end{array}$$

$$-4x^3 + 10x^2 - 2x$$

$$-4x^3 + 10x^2 - 2x$$

$$-4x^3 + 10x^2 - 2x$$

Answer

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Questions?
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Ask Question



Subtract $5x^2 + 3x^1 - x^3$
from $4x + 5x + 3x^3 - x^2$

Question

$$\begin{array}{r} -x^3 + 5x^2 + 3x \\ 3x^3 - x^2 + 9x \\ \hline 4x^3 - 6x^2 + 6x \end{array}$$

$$3x^3 - x^2 + 9x$$

$$4x^3 - 6x^2 + 6x$$

$$4x^3 - 6x^2 + 6x$$

Answer

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Questions?
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Ask Question



Subtract $4x + 5x + 3x^3 - x^2$
from $-5x^2 + 10x^4$

Question

$$\begin{array}{r}
 - 3x^3 - x^2 + 9x \\
 10x^4 - 0 - 5x^2 \\
 \hline
 10x^4 - 3x^3 - 4x^2 - 9x \\
 \boxed{10x^4 - 3x^3 - 4x^2 - 9x}
 \end{array}$$

Answer

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Questions?
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Ask Question



Subtract $-5x^2 + 10x^4$
from $5x^3 + x$

Question

$$\begin{array}{r}
 -10x^4 - 0 - 5x^2 \\
 0 + 5x^3 + 0 + x \\
 \hline
 -10x^4 + 5x^3 + 5x^2 + x \\
 \boxed{-10x^4 + 5x^3 + 5x^2 + x}
 \end{array}$$

Answer

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Questions?
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Subtract $5x^3 + x$
from $5 + 3x^4 + 5x^2$.

Question

$$\begin{array}{r}
 0 + 5x^3 + 0 + x \\
 3x^4 + 0 + 5x^2 + 0 + 5 \\
 \hline
 3x^4 - 5x^3 + 5x^2 - x + 5 \\
 \boxed{3x^4 - 5x^3 + 5x^2 - x + 5}
 \end{array}$$

Answer

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Questions?
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Ask Question



Subtract $5 + 3x^4 + 5x^2$
from $5x^2 + 3x^1 - x^3$

Question

$$\begin{array}{r}
 \underline{-3x^4 + 0 + 5x^2 + 0 + 5} \\
 0 - x^3 + 5x^2 + 3x \\
 \hline
 -3x^4 - x^3 + 0x^2 + 3x - 5 \\
 \boxed{-3x^4 - x^3 + 3x - 5}
 \end{array}$$

Answer

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Questions?
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Ask Question



Multiply $5x^3$ and $7x^5$.

Question

$$\begin{array}{l} 5x^{\textcircled{3}} \cdot 7x^{\textcircled{5}} \\ (5 \cdot 7) \cdot x^{(3+5)} \\ \boxed{35x^8} \end{array}$$

Answer

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Questions?
Ask a live tutor now!

Ask Question



Multiply $3x^2$ and $7x$.

Question

Answer

$$\begin{array}{l} 3x^{\textcircled{2}} \cdot 7x^{\textcircled{1}} \\ (3 \cdot 7) \cdot x^{(2+1)} \\ \boxed{21x^3} \end{array}$$

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Questions?
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Ask Question



Multiply $2x^7$ and $5x^3$.

Question

Answer

$$\begin{array}{l} 2x^{\textcircled{7}} \cdot 5x^{\textcircled{3}} \\ (2 \cdot 5) \cdot x^{(7+3)} \\ \boxed{10x^{10}} \end{array}$$

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Questions?
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Ask Question



Multiply $7x$ and $8x^2$.

Question

$$\begin{array}{l} 7x^{\textcircled{1}} \cdot 8x^{\textcircled{2}} \\ (7 \cdot 8) \cdot x^{(1+2)} \\ \boxed{56x^3} \end{array}$$

Answer

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Questions?
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Ask Question



Multiply $5x^3$ and $7x^4$.

Question

$$\begin{array}{l} 5x^{\textcircled{3}} \cdot 7x^{\textcircled{4}} \\ (5 \cdot 7) \cdot x^{(3+4)} \\ \boxed{35x^7} \end{array}$$

Answer

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Questions?
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Ask Question



Multiply $10x^0$ and $7x^0$.

Question

$$10x^0 \cdot 7x^0$$
$$(10 \cdot 7) \cdot x^{(0+0)}$$

Answer

70

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Questions?
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Ask Question ▶

Multiply $(5x^3 + 2)$ and $(3x^2 + 4)$.

Question

Answer

$$\begin{aligned}
 &(5x^3 + 2) \cdot (3x^2 + 4) \\
 &5x^3(3x^2 + 4) + 2(3x^2 + 4) \\
 &5x^3 \cdot 3x^2 + 5x^3 \cdot 4 + 2 \cdot 3x^2 + 2 \cdot 4 \\
 &15x^5 + 20x^3 + 6x^2 + 8
 \end{aligned}$$

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Questions?
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Ask Question ▶

Multiply $(7x^1 + 2)$ and $(5 + 4x)$.

Question

Answer

$$(7x^1 + 2) \cdot (4x + 5)$$

$$7x(4x + 5) + 2(4x + 5)$$

$$7x \cdot 4x + 7x \cdot 5 + 2 \cdot 4x + 2 \cdot 5$$

$$28x^2 + 35x + 8x + 10$$

$$28x^2 + 43x + 10$$

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Questions?
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Multiply (x^0+3) and $(9x^3+7)$.

Question

Answer

$$(x^0 + 3)(9x^3 + 7)$$

$$(1 + 3)(9x^3 + 7)$$

$$4(9x^3 + 7)$$

$$4 \cdot 9x^3 + 4 \cdot 7$$

$$36x^3 + 28$$

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Questions?
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Ask Question ▶

Multiply $(3x^4 + 6)$ and $(6 + 3x^4)$.

Question

Answer

$$(3x^4 + 6) \cdot (3x^4 + 6)$$

$$3x^4(3x^4 + 6) + 3x^4(3x^4 + 6)$$

$$3x^4 \cdot 3x^4 + 3x^4 \cdot 6 + 6 \cdot 3x^4 + 6 \cdot 6$$

$$9x^8 + 18x^4 + 18x^4 + 36$$

$$9x^8 + 36x^4 + 36$$

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Questions?
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Ask Question ▶

Multiply $(2x^5 + 7)$ and $(4 + x^7)$.

Question

Answer

$$(2x^5 + 7) \cdot (x^7 + 4)$$

$$2x^5(x^7 + 4) + 7(x^7 + 4)$$

$$2x^5 \cdot x^7 + 2x^5 \cdot 4 + 7 \cdot x^7 + 7 \cdot 4$$

$$2x^{12} + 8x^5 + 7x^7 + 28$$

$$2x^{12} + 7x^7 + 8x^5 + 28$$

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Questions?
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Ask Question ▶

Multiply $(6x^7 + 3)$ and $(7 + x^4)$.

Question

Answer

$$(6x^7 + 3) \cdot (x^4 + 7)$$

$$6x^7(x^4 + 7) + 3(x^4 + 7)$$

$$6x^7 \cdot x^4 + 6x^7 \cdot 7 + 3 \cdot x^4 + 3 \cdot 7$$

$$6x^{11} + 42x^7 + 3x^4 + 21$$

$$6x^{11} + 42x^7 + 3x^4 + 21$$

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Questions?
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Ask Question



Simplify $(5x^3)^5$

Question

Answer

$$(5x^3)^5$$

$$(5)^5 \cdot (x^3)^5$$

$$3125 \cdot x^{15}$$

$$3125x^{15}$$

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Questions?
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Ask Question



Simplify $(3x^2)^3$

Question

Answer

$$(3x^2)^3$$

$$(3)^3 \cdot (x^2)^3$$

$$27 \cdot x^6$$

$$27x^6$$

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Ask Question



Simplify $(2x^7)^3$

Question

Answer

$$(2x^7)^3$$

$$(2)^3 \cdot (x^7)^3$$

$$8 \cdot x^{21}$$

$$8x^{21}$$

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Ask Question



Simplify $(7x)^2$.

Question

Answer

$$(7x)^2$$

$$(7)^2 \cdot (x)^2$$

$$49 \cdot x^2$$

$$49x^2$$

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Ask Question



Simplify $(5x^3)^3$

Question

Answer

$$(5x^3)^3$$

$$(5)^3 \cdot (x^3)^2$$

$$125 \cdot x^6$$

$$125x^6$$

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Questions?
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Ask Question



Simplify $(10x^5)^0$

Question

Answer

$$(10x^5)^0$$

$$(10)^0 \cdot (x^5)^0$$

$$1 \cdot 1$$

1

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $15x^5 + 20x^3 + 6x^2 + 5x + 10$ by $3x^2 + 4$.

Question

Answer

$$\begin{array}{r}
 5x^3 + 2 \\
 3x^2 + 4 \overline{) 15x^5 + 20x^3 + 6x^2 + 5x + 10} \\
 \underline{15x^5 + 20x^3} \\
 6x^2 + 5x + 10 \\
 \underline{6x^2} \\
 5x + 2
 \end{array}$$

Quotient = $5x^3 + 2$
Remainder = $5x + 2$

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing
 $3x^4 + 4x^3 + 12x^2 + 12x + 14$ by $x^2 + 3$.

Question

Answer

$$\begin{array}{r}
 3x^2 + 4x + 3 \\
 x^2 + 3 \overline{) 3x^4 + 4x^3 + 12x^2 + 12x + 14} \\
 \underline{- 3x^4} \\
 4x^3 + 3x^2 + 12x + 14 \\
 \underline{- 4x^3} \\
 3x^2 + 12x + 14 \\
 \underline{- 3x^2} \\
 12x + 14 \\
 \underline{- 12x} \\
 14 \\
 \underline{- 9} \\
 5
 \end{array}$$

Quotient = $3x^2 + 4x + 3$
Remainder = 5

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $4x^4 + 3x^2 + 12x + 11$ by $4x + 3$.

Question

Answer

$$\begin{array}{r}
 x^3 - \frac{3x^2}{4} + \frac{21x}{16} + \frac{129}{64} \\
 4x + 3 \overline{) 4x^4 + 3x^2 + 12x + 11} \\
 \underline{4x^4 + 3x^3} \\
 -3x^3 + 3x^2 + 12x + 11 \\
 \underline{-3x^3 - \frac{9x^2}{4}} \\
 + + \frac{9x^2}{4} \\
 \hline
 \frac{21x^2}{4} + 12x + 11 \\
 \underline{\frac{21x^2}{4} + \frac{63x}{16}} \\
 \phantom{\frac{21x^2}{4}} + \frac{129x}{16} + 11 \\
 \underline{\phantom{\frac{21x^2}{4}} + \frac{129x}{16} + \frac{387}{64}} \\
 \phantom{\frac{21x^2}{4}} \phantom{+ \frac{129x}{16}} + \frac{317}{64}
 \end{array}$$

$$\begin{aligned}
 \text{Quotient} &= x^3 - \frac{3x^2}{4} + \frac{21x}{16} + \frac{129}{64} \\
 \text{Remainder} &= \frac{317}{64}
 \end{aligned}$$

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $4x^4 + 15x^2 - 1$ by $3 + 4x^2$.

Question

$$\begin{array}{r}
 x^2 + 3 \\
 4x^2 + 3 \overline{) 4x^4 + 15x^2 - 1} \\
 \underline{4x^4 + 3x^2} \\
 12x^2 - 1 \\
 \underline{12x^2 + 9} \\
 -10
 \end{array}$$

Answer

Quotient = $x^2 + 3$
Remainder = -10

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing
 $2x^4 + 11x^3 + 33x^2 + 77x + 105$ by $x^2 + 5x + 7$.

Question

Answer

$$\begin{array}{r}
 2x^2 + x + 14 \\
 x^2 + 5x + 7 \overline{) 2x^4 + 11x^3 + 33x^2 + 77x + 105} \\
 \underline{2x^4 + 10x^3 + 14x^2} \\
 x^3 + 19x^2 + 77x + 105 \\
 \underline{x^3 + 5x^2 + 7x} \\
 14x^2 + 70x + 105 \\
 \underline{14x^2 + 70x + 98} \\
 7
 \end{array}$$

Quotient = $2x^2 + x + 14$
 Remainder = 7

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $x^3 + 14x^2 + 7x + 103$ by $14 + x$.

Question

Answer

$$\begin{array}{r}
 x^2 + 7 \\
 x + 14 \overline{) x^3 + 14x^2 + 7x + 103} \\
 \underline{x^3 + 14x^2} \\
 7x + 103 \\
 \underline{7x + 98} \\
 5
 \end{array}$$

Quotient = $x^2 + 7$
Remainder = 5

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $x^3 + 14x^2 + 7x + 103$ by $14 + x$

Question

$x^3 + 14x^2 + 7x + 103$ by $x + 14$

Answer

$1 \cdot x^3 + 14 \cdot x^2 + 7 \cdot x + 103$ by $x - (-14)$

$$\begin{array}{r|rrrr}
 -14 & 1 & 14 & 7 & 103 \\
 & & -14 & 0 & -98 \\
 \hline
 & 1 & 0 & 7 & 5
 \end{array}$$

Quotient: $1 \cdot x^2 + 0 \cdot x + 7$ Remainder: 5

Quotient: $x^2 + 7$

Remainder: 5

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Questions?
Ask a live tutor now!

Ask Question



Find quotient and remainder on dividing
 $x^3 + 4x^2 + 5x + 6$ by $x + 3$

Question

$x^3 + 4x^2 + 5x + 6$ by $x + 3$

Answer

$1 \cdot x^3 + 4 \cdot x^2 + 5 \cdot x + 6$ by $x - (-3)$

Diagram illustrating synthetic division:

Divisor: -3

Dividend coefficients: $1, 4, 5, 6$

Process:

- $1 \cdot (-3) = -3$, added to 4 gives 1
- $1 \cdot (-3) = -3$, added to 5 gives 2
- $2 \cdot (-3) = -6$, added to 6 gives 0

Quotient: $1 \cdot x^2 + 1 \cdot x + 2$

Remainder: 0

Quotient: $x^2 + x + 2$

Remainder: 0

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing
 $7x^4 - 35x^3 + 5x^2 - 18x - 35$ by $x - 5$.

Question

$7x^4 - 35x^3 + 5x^2 - 18x - 35$ by $x - 5$

Answer

$7 \cdot x^4 - 35 \cdot x^3 + 5 \cdot x^2 - 18 \cdot x - 35$ by $x - 5$



Quotient: $7x^3 + 0x^2 + 5x + 6$

Remainder: -5

Quotient: $x^3 + 5x + 6$

Remainder: -5

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Questions?
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Ask Question



Find quotient and remainder on dividing
 $3x^3 - 12x^2 - 7x + 28$ by $x - 4$

Question

$3x^3 - 12x^2 - 7x + 28$ by $x - 4$

Answer

$3 \cdot x^3 - 12 \cdot x^2 - 7 \cdot x + 28$ by $x - 4$

4	3	-12	-7	28
		+12	+0	-28
	3	0	-7	0

Quotient: $3x^2 + 0x - 7$ Remainder: 0

Quotient: $3x^2 - 7$

Remainder: 0

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Questions?
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Ask Question ▶

Find quotient and remainder of dividing $x^4 + 8x^3 - 4x - 32$ by $x + 8$.

Question

$x^4 + 8x^3 - 4x - 32$ by $x + 8$

Answer

$1x^4 + 8x^3 + 0x^2 - 4x - 32$ by $x - (-8)$

-8	1	8	0	-4	-32
		+ -8	+ 0	+ 0	+ 32
	1	0	0	-4	0

Quotient: $1x^3 + 0x^2 + 0x - 4$

Remainder: 0

Quotient: $x^3 - 4$

Remainder: 0

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Questions?
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Ask Question ▶

Find quotient and remainder on dividing $x^2 + 4x - 32$ by $4 - x$

Question

Answer

$$x^2 + 4x - 32 \text{ by } -(x - 4)$$

$$-(x^2 + 4x - 32) \text{ by } x - 4$$

$$\boxed{-1} \cdot x^2 - \boxed{4} \cdot x + \boxed{32} \text{ by } x - \boxed{4}$$

4		-1	-4	32
			+	
			-4	-32
		-1	-8	0

Quotient: $-1 \cdot x - 8$

Remainder: 0

Quotient: $-x - 8$

Remainder: 0

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