

8-29-17 1st Trig

Chapter 1 Test Friday

Review

$$\textcircled{1} \quad 6(n+2) - (4n-3) = 25$$

$$6n+12-4n+3=25$$

$$\begin{array}{r} 2n+15=25 \\ -15 \quad -15 \\ \hline \end{array}$$

$$\frac{2n}{2} = \frac{10}{2}$$

$$n=5$$

$$\textcircled{2} \quad 6n - (2n+4) = 2(n+8)$$

$$6n - 2n - 4 = 2n + 16$$

$$\begin{array}{r} 4n - 4 = 2n + 16 \\ -2n \quad -2n \\ \hline \end{array}$$

$$\begin{array}{r} 2n - 4 = 16 \\ +4 \quad +4 \\ \hline \end{array}$$

$$\frac{2n}{2} = \frac{20}{2}$$

$$n=10$$

$$\textcircled{3} (3a^2b) \cdot (5ab^4) =$$

$$3aab \quad 5a bbbb = 15a^3b^5$$

$$\textcircled{4} a^4 \cdot a^{10} = a^{14}$$

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$$\textcircled{5} (n+2)(n-8)$$

$$n^2 - 8n + 2n - 16$$

$$n^2 - 6n - 16$$

$$\textcircled{6} (n+5)(2n^2+3n-1)$$

$$2n^3 + 3n^2 - n + 10n^2 + 15n - 5$$

$$2n^3 + 13n^2 + 14n - 5$$

$$\textcircled{7} 3ny^2 + 6n^2y + 2n^2y - 5ny^2$$

$$-2ny^2 + 8n^2y$$

$$\textcircled{8} (-3n^3y^2)^2$$

$$-3n^3y^2 \cdot -3n^3y^2$$

$$-3nnnyy \cdot -3nnnyy$$

$$9n^6y^4$$

$$\textcircled{9} \sqrt{48}$$

$$\begin{array}{c} 48 \\ \wedge \\ 6 \quad 8 \\ \wedge \quad \wedge \\ \textcircled{3} \textcircled{2} \quad 4 \quad \textcircled{2} \\ \quad \quad \quad \wedge \\ \quad \quad \quad \textcircled{2} \textcircled{2} \end{array}$$

$$2 \cdot 2 \sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}$$

$$4\sqrt{3}$$

$$\textcircled{10} \sqrt[4]{a^9 b^4}$$

$$b a a \sqrt[4]{\textcircled{a a a a} \textcircled{a} \textcircled{b b b b}}$$

$$a^2 b \sqrt[4]{a}$$

$$\textcircled{11} \frac{6 \pm \sqrt{-8}}{4}$$

$$\frac{\overset{3}{6} \pm \overset{1}{2} i \sqrt{2}}{4}$$

$$\frac{1}{2}$$

$$\frac{3 \pm i \sqrt{2}}{2}$$

$$\textcircled{12} \frac{a^{-3} b^2 c^{-1}}{a^2 b c^{-4}}$$

$$\frac{b^2 c^4}{a^3 c a^2 b} = \frac{\cancel{b} \cancel{b} \cancel{c} \cancel{c} \cancel{c} \cancel{c}}{a \cancel{a} \cancel{a} \cancel{a} \cancel{a} \cancel{b}}$$
$$\frac{bc^3}{a^5}$$

$$\textcircled{13} \left(\frac{3}{4}\right)^{-2}$$

$$\left(\frac{3}{4}\right)^{-1}{}^2$$

$$\left(\frac{4}{3}\right)^2 = \frac{4}{3} \cdot \frac{4}{3} = \frac{16}{9}$$

8-29-17 3rd Trig
Chapter 1 test Friday

Review

$$\textcircled{1} \quad 6(2n-1) - (9n-3) = 12$$
$$12n - 6 - 9n + 3 = 12$$

$$\begin{array}{r} 3n - 3 = 12 \\ +3 \quad +3 \\ \hline 3n = 15 \\ \frac{3n}{3} = \frac{15}{3} \\ n = 5 \end{array}$$

$$\textcircled{2} \quad 6n - (4n - 8) = 5(n - 1)$$

$$6n - 4n + 8 = 5n - 5$$

$$\begin{array}{r} 2n + 8 = 5n - 5 \\ -2n \quad -2n \\ \hline \end{array}$$

$$\begin{array}{r} 8 = 3n - 5 \\ +5 \quad +5 \\ \hline \end{array}$$

$$\frac{13}{3} = \frac{3n}{3}$$

$$4\frac{1}{3} = n$$

$$\textcircled{3} (2n^3y^2)(-5ny^3)$$

$$2nnnyy \cdot -5 \cdot n \cdot yyy$$

$$-10n^4y^5$$

$$\textcircled{4} (3n^3y^2)^3$$

$$3n^3y^2 \cdot 3n^3y^2 \cdot 3n^3y^2$$

$$3nnnyy \ 3nnnyy \ 3nnnyy$$

$$27n^9y^6$$

$$\textcircled{5} a^4 \cdot a^{10} = a^{14}$$

$$\textcircled{6} (n+3)(n-4)$$

$$n^2 - 4n + 3n - 12$$

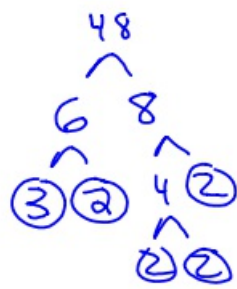
$$n^2 - n - 12$$

$$\textcircled{7} (n+3)(2n^2-6n+1)$$

$$2n^3 - 6n^2 + n + 6n^2 - 18n + 3$$

$$2n^3 - 17n + 3$$

$$\textcircled{8} \sqrt{48}$$



$$2 \cdot 2 \sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}$$

$$4\sqrt{3}$$

$$\textcircled{9} \sqrt[4]{a^9 b^4}$$

$$baa \sqrt[4]{\underbrace{aaaa}_{a^4} \underbrace{aaaa}_{a^4} a \underbrace{bbbb}_{b^4}}$$

$$a^2 b \sqrt[4]{a}$$

$$\textcircled{10} \sqrt[3]{16a^7}$$

$$aa2 \sqrt[3]{\underbrace{2 \cdot 2 \cdot 2 \cdot 2}_{2^4} \underbrace{aaaa}_{a^4} a}$$

$$2a^2 \sqrt[3]{2a}$$

$$\textcircled{11} \frac{8 \pm \sqrt{-8}}{4}$$

$$\frac{\frac{4}{8} \pm \frac{1}{2} i \sqrt{2}}{\frac{4}{2}}$$

$$\frac{4 \pm i \sqrt{2}}{2}$$

$$\textcircled{12} \frac{10 \pm \sqrt{-50}}{20}$$

$$\frac{\cancel{10}^2 \pm \cancel{5}^1 \sqrt{2}}{\cancel{20}^4} = \frac{2 \pm i\sqrt{2}}{4}$$

$$\textcircled{13} \left(\frac{2}{3}\right)^{-2} =$$
$$\left(\frac{2}{3}\right)^{-1} \cdot 2$$

$$\left(\frac{3}{2}\right)^2 = \frac{3}{2} \cdot \frac{3}{2} = \frac{9}{4}$$

8-29-17 4th Trig

Test on Chapter 1 on Friday
Review

$$\textcircled{1} \quad 3(2n-5) - (n-8) = 20$$

$$6n - 15 - n + 8 = 20$$

$$5n - 7 = 20$$

$$\begin{array}{r} +7 \quad +7 \\ \hline \end{array}$$

$$\frac{5n}{5} = \frac{27}{5}$$

$$n = 5\frac{2}{5} \quad (5.4)$$

$$\textcircled{2} \quad 6n - (3n+1) = 5(2n+4)$$

$$6n - 3n - 1 = 10n + 20$$

$$\begin{array}{r} \textcircled{3n} - 1 = 10n + 20 \\ -3n \quad -3n \\ \hline \end{array}$$

$$\begin{array}{r} -1 = 7n + 20 \\ -20 \quad -20 \\ \hline \end{array}$$

$$\frac{-21}{7} = \frac{7n}{7}$$

$$-3 = n$$

$$\textcircled{3} \quad (2a^2b^3) \cdot (5ab^2)$$

$$2aabb^3 \quad 5abb^2$$

$$10a^3b^5$$

$$\textcircled{4} a^{10} \cdot a^4 = a^{14}$$

a a a a a a a a a a a a a a

$$\textcircled{5} \underline{5n^2y} + \underline{6ny^2} - \underline{2n^2y} - \underline{4ny^2}$$

$$3n^2y + 2ny^2$$

$$\textcircled{6} (n+5)(n-10)$$

$$n^2 - 10n + 5n - 50$$

$$n^2 - 5n - 50$$

$$\textcircled{7} (n+2)(4n^2+3n-1)$$

$$4n^3 + 3n^2 - n + 8n^2 + 6n - 2$$

$$4n^3 + 11n^2 + 5n - 2$$

$$\textcircled{8} \sqrt{-48}$$

48
 6 ^ 8
 3 ^ 2 ^ 4 ^ 2
 2 ^ 2

$$2 \cdot 2 \cdot \sqrt{-1} \cdot \cancel{2} \cdot \cancel{2} \cdot \cancel{2} \cdot 3$$

$$4i\sqrt{3}$$

$$\textcircled{9} \quad \sqrt[4]{a^8 b^5}$$

$$baa \sqrt[4]{\underbrace{aaaa}_{\text{circled}} \underbrace{aaaa}_{\text{circled}} \underbrace{bbbb}_{\text{circled}} b}$$

$$a^2 b \sqrt[4]{b}$$

$$\textcircled{10} \quad \frac{8 \pm \sqrt{-8}}{4} = \frac{8 \pm 2i\sqrt{2}}{4}$$

$$\frac{4 \pm i\sqrt{2}}{2}$$

$$\textcircled{11} \quad \left(\frac{2}{3}\right)^{-2}$$

$$\left(\frac{2}{3}\right)^{-1} \cdot 2$$

$$\left(\frac{3}{2}\right)^2 = \frac{3}{2} \cdot \frac{3}{2} = \frac{9}{4}$$