Exponent and square roots worksheet

1. $x^5(2x^3)$	2. $(-6m^2n^2)(3mn)$
3. $\left(\dfrac{3x^2}{2}\right)^2$	4. $y^4 \times \sqrt{\dfrac{25}{y^8}}$
5. $\dfrac{2^8 \times a^5}{4^3 \times a^3}$	6. $\left[\left(-\dfrac{3}{4}\right)^{-2}\right]^2$

7. $(18)^{\frac{3}{2}} \times (6)^{-\frac{1}{2}} \times \dfrac{1}{\sqrt{27}}$

8. $\left(2\dfrac{1}{4}\right)^{-\frac{1}{2}} \times \left(3\dfrac{3}{8}\right)^{\frac{1}{2}}$

9. $\dfrac{\left(2\,r^{-1}s^2t^0\right)^{-2}}{2rs}$

10. $\left[\left(\dfrac{1}{4}\right)^{-3} - \left(\dfrac{1}{3}\right)^{-3}\right] \div \left(\dfrac{1}{6}\right)^{-3}$

Answers

1. $2x^8$
2. $-18m^3n^3$
3. $(9/4) x^4$
4. 5
5. $4a^2$
6. 256/81
7. 972
8. ½
9. $r/(8s^5)$
10. 37/216