Solving Quadratic Equations /20

1. Solve the quadratic equations ***by the method indicated***. Show your work. 2 marks each

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| a) $0=\frac{1}{2}\left(x-1\right)^{2}-6$ **by graphing** (round answer(s) to the nearest tenth, if necessary) | b) $3x^{2}+17x-28=0$ by factoring |
| c) $(x-5)^{2}-25=39$ by the square root principle | d) $5x^{2}-8x-4=0$ by the quadratic formula  |

2. Solve the following quadratic equations by the method of your choice. Show your work. If you solve by graphing, you must show your graph. *Give all answers as exact values i.e. integers, reduced fractions, terminating decimals, or simplified radicals.* 2 marks each

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| a) $a^{2}+2a-3=0$ | b) $6x^{2}-11x=0$ |
| c) $x\left(2x-3\right)-2(3+2x)=-4(x+1)$ | d) $3x^{2}-4x-2=0$ |
| e) $x^{2}+11=300$ | f) $9x^{4}+20=41x^{2}$ |