

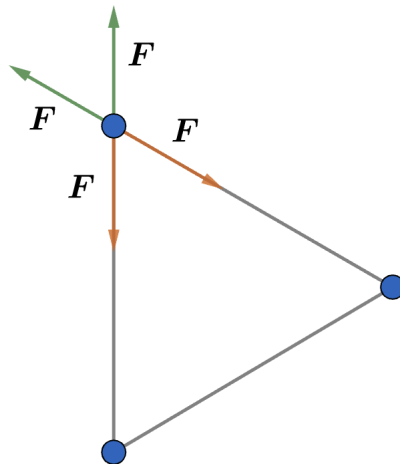
2011 F=ma Exam: Problem 12

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For the case of two balls, each mass feels the gravitational force F from the other mass and the compressive force from the rod. To balance gravity, the compressive force also has magnitude F .



For the case of three balls, each mass feels the gravitational forces from the other two masses and the compressive forces from the two rods connected to it. To balance gravity, the compressive force also has magnitude F .



Thus, the answer is .